THE

# Gulstonian Lectures

ON

# EPILEPSY.

*Delivered before the Royal College of Physicians,*

BY W. R. GOWERS, M.D., F.R.C.P.,

SENIOR ASSISTANT-PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL, PHYSICIAN TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

## LECTURE II.—PART I.

MR. PRESIDENT AND GENTLEMEN,—The symptoms of the cases of convulsive disease which form the subject of these lectures, the forms of attack, their variations in severity and frequency, the mental and physical condition of the sufferers, and the mutual relation of these and other pathological elements, constitute subjects of much interest. It is useless to attempt in this lecture to traverse the whole of this extensive field, and our survey must be confined to a few points.

One subject which seems worthy of a passing notice, is the relative frequency with which fits occur by day or by night, using the terms as synonymous with the sleeping and the waking states. The investigation of this point in 840 cases has yielded the following conclusions:—The attacks occurred only, or almost only, at night in one-fifth (21 per cent.); only, or almost only, by day in rather more than two-fifths (43 per cent.) They occurred by both day and night in rather less than two-fifths (37 per cent.) Fits occurred in the night, partially or only, in rather more than half the cases (57 per cent.); by day, partially or only, in four-fifths of the cases (80 per cent.) In 1 per cent. the attacks occurred only while going to sleep; in one-half per cent. only on waking up out of sleep. In 5 per cent. the attacks occurred only in the early morning. A much larger number had their first attack in the early morning, and many of these patients were in the habit of early rising, a habit which, it thus appears, should be practised with caution by those predisposed to epilepsy. Between the cases of epilepsy and those with hystero-epileptic symptoms, there was no difference in the frequency with which the attacks occurred in the day or in the night. The proportion, for instance, in which the attacks occurred exclusively, or almost exclusively, by night was, of epileptics, 21 per cent., and of cases with hystero-epileptic attacks, 20 per cent. In epileptics it is somewhat more common for the first fit to occur in the day than in the night—rather more than half commenced in the former, rather less than half in the latter. In hystero-epileptics, it is much more common for the first fit to occur in the day than in the night. Two-thirds commenced in the day, one-third in the night. Nevertheless, in more than half these cases (56 per cent.) some fits subsequently occurred during the night—that is, during sleep. When the first fit occurred in the day the subsequent fits occurred only in the day in half the cases, only in the night in one-seventh; by both night and day in one-third. When the first fit occurred during the night the subsequent fits occurred only at night in about two-fifths of the cases; by both day and night also in about two-fifths; and by day only in one-sixth.

If we may apply to these proportions the doctrine of probabilities, we may say that if a patient who has his first fit in the day has subsequent fits, the probability is as six to one that some of his attacks will occur in the day; the probabilities are equal that his attacks will, or will not, be confined to the day; and they are equal that he will, or will not, have some attacks in the night; while the probability that he will have attacks only in the night is but one in seven. If a patient who has his first fit in the night has subsequent attacks, the probabilities are equal that these also will occur only by night, and that they will occur both by night and by day, being in each case two in five. The probability is as five to one that they will not be confined to the day—that is, in favour of some fits occurring in the night.

Frequently fits which have recurred for a time in one condition, during sleep, waking, or both, change their time. The conclusions deducible regarding these are as follows:—(1) When fits which have occurred only by night commence to occur by day, they commonly continue also during the night. (2) When fits which have occurred only during the day occur during the night, they commonly cease by day. (3) Attacks which have occurred by day and night often cease to occur in the day and continue at night, but very rarely cease by night and continue by day.

The relation of attacks in women to menstruation is a subject on which various opinions have been expressed. The facts I have to offer are small in extent, the point having been investigated in sufficient detail in only 82 cases. In one-twelfth (7 cases) no attacks occurred at the time of menstruation; in one-third (29 cases) there was no difference at these times; in more than half (46 cases) the attacks were worse at the monthly periods; most frequently they were worse before the period (17 cases); next in frequency they were worse during the period (15 cases), and much less frequently after the period (4 cases). In 10 cases the exacerbation was variable, either before, during, or after; in 2 cases the attacks were worse at the menstruation soon after the patient became subject to fits, but not after the disease had existed for some years. In two cases fits never occurred at the periods when menstruation was regular, but they did when it was irregular.

I pass now to the phenomena of the attacks. The fits in idiopathic epilepsy are so rapid in their evolution and so similar in most cases in their developed characters, the opportunities for watching them are so rare, that mere observation of attacks proved for a long time unproductive of much addition to our knowledge. A new era in the study of epilepsy may be said to have commenced with the investigation, by Dr. Hughlings Jackson, of the modes of onset of attacks which begin deliberately, combined with that of the subjective sensations by which attacks commence that are less deliberate in their onset. This subject—the study of the modes of onset—is still full of promise to further investigation, and there is perhaps no point in the symptoms of a consecutive series of cases to which our attention may be more usefully directed.

I need scarcely remind you that the aura of an attack was formerly regarded as a change in the nerves of the part to which it was referred, exciting the fit, and that it is now known to be merely the impression made upon the consciousness by the commencing action in the brain, or by the effect of this on the periphery. The fact that an aura commencing in a limb may be arrested by a ligature around the limb, above the part to which the sensation is referred, was once thought to constitute evidence that the process of the convulsion originated at the periphery. It is now well known that the ligature will arrest a fit which is due to a cerebral tumour as effectually, and more frequently, than one of any other kind, and of this I have seen many striking instances. The fact that the aura is the result of the commencing change in the brain renders its study of even greater importance than if it originated at the periphery. By its means we gain information, to be obtained in no other way, of the brain function first deranged—that is, of the functional region in which the process of the fit begins. In some cases, at least, this may be regarded as the seat of the disease. We learn also something of the form of normal cerebral action, which disease modifies rather than subverts.

The aura of an attack, using the term in its widest meaning, as signifying the subjective commencement, may consist in a consciousness of motion, or of sensation, or in a mental state. It has been long and often maintained by Dr. Hughlings Jackson, in extension of the older view of Laycock, that the whole brain is made up of structures which subserve sensori-motor processes, and that into such processes all its functions may be resolved. It is unnecessary now to consider this view as a whole, but that every structure of the brain concerned with sensation proper is connected, directly or indirectly, with a part concerned with motion may be regarded as a proposition scarcely needing proof. A discharge, such as occurs in an epileptic fit, taking place in either of these related structures, may lead to a discharge in the other. The two may act so simultaneously that the resulting motion and sensation may occur together. The patient may feel a tingling in his hand at the same moment as the fingers begin to twitch. Or the discharge in

one may lead the way—be followed by the other at an interval. The twitching or the tingling may come first. I think that it is of importance to determine, in any given case, with which the attack commences—the motion or the sensation—i.e., whether the motor or the sensory centre leads in the discharge. By so doing we are able to understand better the association of auræ and their progress. It is necessary, however, carefully to discriminate the form of the sensation, because, as Dr. Jackson has also pointed out, the consciousness may be affected directly by the action of a motor centre, although no movement results. There are motor sensations as well as sensory sensations, and, as we shall see, a fit may begin by a sense of motion before any actual movement occurs. The word "sensation," however, will here be used, when unqualified, to signify a sensation proper, such as numbness, tingling, and the like.

In what proportion of cases is consciousness lost so early that the commencement of the fit is unfelt? Of 1000 cases, in which the presence or absence of a warning was noted, it was always absent in 495, while some aura existed, at least occasionally, in 505. Thus, roughly speaking, loss of consciousness precedes, or accompanies, the first symptoms in half the cases; in the other half the patient is aware of the commencement of the attack. We may consider what facts regarding the modes of onset these 505 cases supply.

The sensation or motion with which the attacks commence may be referred to almost any part of the body, limbs, head, trunk, organs of special sense, and to many viscera. We must therefore infer that the process of the fit may commence in any part of the brain in which these various parts are represented. We may, for the present purpose, classify most of the auræ or modes of onset into seven groups. (1) The unilateral auræ, a motion or sensation in one side of the tongue, face, trunk, or in one arm or one leg. (2) Certain general auræ; bilateral sensations in the limbs, tremors, starts, malaise, faintness, &c. (3) Auræ referred to certain organs, mainly to those to which the pneumogastric nerve is distributed, and to this group belong most of the visceral warnings. The most common is the well-known epigastric sensation, and others are a feeling of choking, dyspnœa, nausea, and cardiac sensations. (4) Vertigo and other allied sensations. (5) Certain sensations in the head, pain, &c. (6) Psychical auræ, the consciousness of an emotion or an idea. (7) Special sense warnings; some of these are strictly unilateral, but it is convenient to consider them together. This classification is clinical, and as such is adopted as affording facilities for the determination of facts apart from theories.

We may take first the unilateral peripheral auræ, present in 86 cases, or 17 per cent. of those with warnings. Of these the commencement was in the arm in more than half (45 cases), in the leg and face in smaller and nearly equal numbers (15 and 17 cases), in the tongue in 5, and in the side of the trunk in only 2 cases. Such unilateral commencement is common in seizures due to organic brain disease, and the organic disease causing them is usually on the surface of the brain, in the region stimulation of which causes movements in the parts first affected in the fit. Such stimulation, indeed, as Ferrier has shown, may cause convulsions beginning in the part. But from the series of cases now under consideration all those presenting symptoms suggestive of organic brain disease were excluded.

In 5 cases only the aura was referred first to the tongue, in 2 others the tongue was affected secondarily. In 1 the commencement was by a movement, in 1 by a beating, in the rest there was merely a sensation; in 3 tingling, and in 1 a sensation of something crawling on the tongue. In each case the convulsion was right-sided, and in each case in which the side of the tongue affected was noted, this was also the right side. Hence it seems probable that the sensori-motor processes for the tongue predominate on the left side of the brain, a fact also suggested by the great impairment of the movements of the tongue frequently noticed in right hemiplegia with aphasia. The association of movement of the tongue is twofold, one in its use for speech, one in its use in mastication and deglutition. We may trace this double association in the combinations of the aura. Tingling in the tongue was associated in one case with twitching in the lips, in another with a lateral movement, or sense of movement, in the jaw. The sensation of something crawling on the tongue, in one case, was followed by a feeling of sickness, then of something rising in the throat, and then by palpitation of the heart.

The seizure commenced in the face in 16 cases, and on one side as frequently as on the other, but much more frequently by a motion than by a sensation. In 8 cases the mouth was drawn to one side, no doubt by the zygomatic muscles. Commencement in the lips was rare. In only 2 cases was there an initial contraction in the orbicularis of the eyelids, and both were associated with a sensation in the hand, and were right-sided.

The cases in which the attacks commenced in the arm were 40 in number. In about three-quarters of the cases the commencement was in the hand. Of those beginning by spasm, twitching, &c., the first motion was, in most instances, either in the hand as a whole (10 cases) or in the arm as a whole (8 cases). In only one case was there initial movement in the fingers, and this was clonic spasm in the common flexors. In 14 cases the attack began by a sensation—"numbness," "tingling," "pins and needles," &c.; and in these the commencement was, in most, in a definite part of the hand—the forefinger in three cases, never in the thumb, twice in all the fingers, once in the middle finger, once in the palm, twice in the back of the hand, three times in the hand as a whole, and twice at the wrist. It never began higher up the arm. In five other cases the sensation with which the fits began was less simple, and in several was certainly a motor sensation. One patient always felt "as if his arm were drawing up," and would beg that it might be held down, although there was no motion in it. The feeling was accompanied by severe pain "as if the arm would break." In another case there was a somewhat similar pain, "as if the arm were withering up." In a third there was a feeling of stiffness, and in a fourth a feeling of twitching in the first three fingers, apparently without movement, and in a fifth there was a sensation in the back of the arm "as if the nerves were being drawn." The attacks, commencing with motion, or with the sensations last described, probably motor, began in the right and left hands in an equal number of cases; but those commencing with a simple sensation began in the left hand twice as frequently as in the right. In three-quarters of the cases consciousness was lost before the seizure had extended beyond the arm. But in 9 cases, after ascending the arm, the aura passed to the head, and in 4 to the mouth. In 2 cases, after passing up the arm to the shoulder, the aura passed down the side to the leg, and down to the foot. In no case, after passing to the head or mouth, did the sensation afterwards pass down the side to the leg; but in 2 cases, in which it passed to the mouth, it afterwards commenced again in the foot, and passed up the leg.

The seizure commenced in the leg in 14 cases, and in 10 of these in the foot. In only 5 did it distinctly begin as a movement, and this began in the toes once only, in the foot as a whole twice. In 1 case the movement, twitching, began in the hip, and passed down the leg. In 5 cases the commencement was by a simple sensation, once in the great toe, once in the sole, once in the dorsum, once in the foot as a whole, and once in the leg as a whole. A motor sensation, without movement, was described in 1 case: the patient suddenly felt as if the leg were bent up under the other, and that he must stretch it out. Of the cases in which the commencement was in the foot, consciousness was lost before the aura had extended beyond the foot in 2 cases; in 6 the aura extended up the leg and thigh; in 3 of these it passed on up the side to the head. In 2 cases, after passing up the side, instead of going to the head it passed down the arm to the hand, and then consciousness was lost. In no case in which it passed up to the head did it afterwards deliberately pass down the arm—just as in the cases in which the aura commenced in the arm if it ascended to the head, it never afterwards passed down the side. The passage of the discharge to the region in which the head is represented appears to be closely connected with loss of consciousness.[1] In 2 cases the sensation, commencing in the foot, passed up the side, and when it had got to the level of the hand it recommenced there, and then passed up the arm. There are thus two modes in which the arm is involved secondarily to the leg, just as there are two modes in which the leg is involved secondarily to the arm—one extension by continuity, passing from the one limb to the other by the trunk, and passing down the limb secondarily involved, and the other by separate commencement in the extremity of the second limb, and the passage of the aura up both. It seems probable that in the

[1] In this statement, it must be remembered, cases of idiopathic disease are spoken of. In convulsion from organic disease, usually more deliberate, I have known a sensory aura pass up the arm to the side of the face and afterwards pass down the side of the trunk to the leg.

cases in which it passes from one to the other by continuity through the trunk, the discharge in the sensory centre takes the lead, and determines the course of the aura, although it may be closely, even instantly, followed by the motor discharge. The representation in the brain of the cutaneous nerves must be as continuous as the skin in which they are distributed. The passage of the aura by continuity up the arm, down the trunk, and down the leg, or *vice versâ*, is intelligible on this theory, but scarcely on the theory that the discharge in these cases begins in the motor centres. This view is supported by a case lately seen, in which the seizures began with a sensation in the foot, without motion. The sensation passed, as such, up the leg and side, and *down* the arm to the hand, and not until it reached the hand was spasm added; the hand began to twitch, and the movement passed *up* the arm, and then consciousness was lost.

In several cases in which the seizure began in the mouth and face, the aura passed afterwards down the arm first and down the leg afterwards. No aura *beginning* in the tongue, face, or leg was associated with one in the special senses. In 3 cases of attacks commencing in the arm there was a subsequent special sense aura, but in each of these the seizure in the arm began by a sensation proper, not by a motion. This seems to indicate that, as might be expected, the special-sense centres are connected with the sensory-limb centres, rather than with the motor-limb centres. The only case in which a special-sense aura was in any way associated with the lower extremity was one in which the seizures began with a pain in the back of the hand, and this pain, as such, passed up the arm and down the leg. When it reached, still as pain, the middle of the thigh, a flash of light appeared before the eyes. The pain went on down the leg, and when it reached the foot consciousness was lost.

In only 2 cases did the attack commence in the side of the trunk, and in 1 the sensation was described as "burning." In 2 cases a left-sided aura was associated with palpitation of the heart. In one patient, a girl, a singular relation existed. The fits began with a feeling of numbness and beating in the right great toe, which passed up the leg, and when it reached the groin, the patient felt a need to micturate. If she could do so the aura ceased; if she could not she suddenly felt as if turning over and over, then a peculiar psychical condition occurred; she lost consciousness, and passed into a severe epileptic fit. I have met with another case in which micturition sometimes arrested a commencing fit. I have also seen a case in which the act of micturition sometimes brought on a fit. The shiver, which in many children and some adults, normally attends the act, indicates the associated affection of higher motor centres, and these facts suggest that the passage of urine during epileptic fits is not merely the result of loss of consciousness, but is really part of the convulsive action.

The mutual relation of the motor and special sense centres in the surface of the brain, ascertained by Hitzig and Ferrier, enable us to understand something of the progress of seizures. They do this whether we regard epilepsy as a cortical disease or not, because from Burdon-Sanderson's researches the relation is similar in the lower centres. For instance, a fit beginning in the face or tongue, if it involves the limbs, takes the arm before the leg, and we find that the arm centres intervene between those for the face and tongue, near the fissure of Sylvius, and those for the leg in the upper part of the hemisphere. Again, in a fit beginning with twitching of the angle of the mouth, rotation of the head commonly succeeds, and the centre for rotation of the head is situated in front of, and contiguous to, the centre for the action of the zygomatic muscle. But in other cases it is difficult to understand the progress of the aura from the experimental facts. For this there are probably three reasons:—First, we know little of the degree of structural association or separation of these centres, the cerebral sulci, of course, affording no information on the matter; secondly, the centres represent in many cases complex movements, and fits begin usually with simple movements; thirdly, we are entirely ignorant of the mutual relations of the sensory centres for the limbs, which Ferrier's experiments locate on the inner aspect of the temporo-sphenoidal lobe. The facts of many auræ make it probable that these rather than the motor centres lead in the discharge, and determine the course of the commencing fit, and I think that thus the progress and association of many auræ may be explained.

A rare but curious condition sometimes attends the onset of a fit which begins unilaterally—what may be termed the alternation of the aura. In some right-sided convulsions, from left meningeal hæmorrhage, which I once watched, the rotation of the head to the right, which accompanied the fit, was preceded by a rotation to the left, and this itself was preceded by a slight initial rotation to the right—a double alternation. I have obtained very few indications of this phenomenon in idiopathic epilepsy. In one case a left-sided fit was preceded by shaking and trembling of the limbs of the right side; in another case the attacks began with a sensation in some left cranial nerve, followed by a sensation around the right wrist.

The great majority of fits which begin unilaterally are epileptic. Of 76 in which the character of the fit could be ascertained, only 9 (or 12 per cent.) presented hystero-epileptic or co-ordinated symptoms.

# Clinical Remarks
ON THE
# USE OF THE CLAMP AND CAUTERY IN THE TREATMENT OF HÆMORRHOIDS AND PROLAPSUS.

*Delivered at King's College Hospital on Jan. 24th,*

BY HENRY SMITH, F.R.C.S.,
PROFESSOR OF SURGERY IN KING'S COLLEGE; SURGEON TO KING'S COLLEGE HOSPITAL.

GENTLEMEN,—You have had opportunities of seeing me operate several times since the beginning of the present session on cases of hæmorrhoids and prolapsus of the rectum by means of the clamp and cautery, and the case just brought before you is one which so well illustrates this particular operation that I think it well to make use of it, as it were, as the text for a few remarks on this subject.

The operation consists, as you are well aware, in drawing down and embracing the tumour within the blades of the clamp; then removing the hæmorrhoid with a sharp pair of scissors, and, lastly, applying the actual cautery freely to the cut surface.

Each of these steps of the operation demands a few words from me. It is very important to isolate the tumours well, so as to compress them easily, and in some cases where the hæmorrhoid runs, as it were, abruptly into the surrounding hypertrophied skin, it is well just to make a slight groove with a pair of scissors. By this means the blades of the clamp compress the growth more readily at its neck. You will have noticed also that in large tumours I use a clamp furnished with a light but powerful screw near its handles. By this means I tighten the grasp of the blades of the clamp more firmly; then, in removing the part, I take great pains not to divide the base of the tumour too close to the clamp. I leave tissue to the extent of an eighth of an inch, so as to have a fair surface for the use of the cautery. The iron is applied very carefully and very freely at a black heat, and then, all the cut surface being so treated, the blades are gently and gradually released by the screw on the clamp. In this way the pressure is taken off the neck of the tumour, and if any vessel is not thoroughly cauterised it immediately bleeds. The blades are then quickly screwed up again, and the hot iron is applied to the vessel until it ceases bleeding. Sometimes it is necessary, as in a case of huge prolapsus you saw me operate on a little time ago, to reapply the hot iron several times to the same vessel before bleeding ceases. You may, however, rest assured that with proper care you can stop bleeding from any vessel here by the use of the cautery.

Each tumour, and there are generally three or four, is treated in this way, and then, when an opiate suppository is introduced by the finger well oiled, the operation is completed. If there is much hypertrophied skin I remove a portion of it, and if the sphincter ani is very tight, I divide it, as in fissure of the rectum. I do this because I fancy in these cases there is less pain after the action of the bowels; for I find that in these cases of long-standing hæmorrhoids

or prolapsus, when the sphincter is very loose, the patient as a rule complains very little of pain after the action of the bowels.

The after-treatment consists in locking up the bowels by occasional opiates, and strictly dieting the patient. In the majority of cases the patient complains of more or less severe pain for an hour or two, and then it goes off. This pain is much alleviated by the application of hot water by means of a sponge. Retention of urine sometimes occurs, but not very frequently, more often in women, who generally suffer much more severely from hæmorrhoids than do men. As a rule, the patient leaves the hospital in a week, the bowels being acted upon by castor oil three clear days after the operation, and then again two days subsequently. Sometimes blood in a coagulated form comes away with the first movement of the bowels, and frightens the patient, but it is only for the most part blood which ran into the bowel at the time of the operation and remained there. At times there may be a little arterial bleeding, but I have never once had to use any stronger measures than to apply a speculum and throw up iced water for stopping any such bleeding.

Now the advantages I claim for this operation are—that it is all completed at once; that it is eminently safe; that the after-suffering is slight, and that the period of convalescence is short. In the old-fashioned method of applying ligatures, the operation may truly be described as not completed at one sitting, for of necessity the threads are left to come away, not rarely a most tedious and painful process. I have seen the most horrible suffering for hours and days after the use of ligatures. Then, again, we may meet with those uncomfortable sequelæ as the result of the presence of foreign bodies, and the subsequent ulceration, tetanus, diffuse inflammation, and pyæmia. Several cases of death have occurred after the use of the ligature from these and other causes; one or two, I regret to say, in my own hands. Some of these cases have been made known, whilst others, especially those occurring in private, have not been heard of. Now, ever since I began the clamp and cautery treatment in this hospital, in the year 1864, I am happy to say we have not had a single fatal or really serious result; and in my own private practice, where during the same period I have operated on several hundreds of cases—some of the most severe description, and at all ages up to eighty—I have only had one death which could fairly and honestly be placed to the account of the operation itself, and this resulted from an accident which ought not to have happened, and occurred several years ago. Three other cases, it is true, died after I had performed an operation, but in these instances, all of which have been published, the condition of the patients was such that it would be very unfair to attribute the fatal result to the operation alone.

I was afraid, however, I should at last meet with a fatal result at the hospital, and this leads me to call your attention to that case of huge prolapsus in which I operated a few weeks ago. The patient was an elderly man who had a prolapsus as big as a cocoa-nut always coming down, and rendering his life a burden. He had already been operated upon twice by a hospital surgeon, but in vain. The patient was then sent to me, and, formidable as the case looked, I determined to undertake it. I applied the clamp deeply in three different directions. There was a great deal of bleeding, and I had to apply the cautery over and over again before I could stop it; and then, just as I was finishing the operation, a most untoward event occurred—severe vomiting, as the result of the anæsthetic, took place. The prolapsus was forced still further down; and before I and my assistants could return the parts, the violent action of the abdominal muscles was such that the weakened coat of the bowel gave way, and a knuckle of small intestine actually protruded through the rent thus made. I carefully returned this as soon as the vomiting ceased, and anxiously waited the result. Our house-surgeon, Mr. Newmarch, watched the patient with great care and treated him with great skill, keeping him constantly under the influence of opium, and locking up his bowels for several days. The result was not a single bad symptom of any kind. On the first action of the bowels there was no protrusion, nor afterwards; and as soon as the man was fairly recovered I removed three longitudinal folds of skin from the anus, so as further to tighten the parts. The man was completely cured. Now, the lesson this case teaches is this—not to employ an agent which could cause vomiting; because, of course, in such a terribly severe case as this it is absolutely needful to clamp deeply, and thus weaken the bowel. It was a most unlooked-for accident, not likely to occur again; in fact, it is hardly reasonable to expect to meet with another such case for operation. I have, however, been called to cases as bad or worse, but where no operation could be recommended.

Simple and safe as is the operation by the clamp and cautery, it has gone through an ordeal of severe criticism; and although it has for some time been established as the best proceeding for hæmorrhoids and prolapsus, I may refer to the objections advanced against the plan. First, it has been stated that it is a rough and painful treatment; but this argument does not hold good now anæsthetics can be used. A more solid objection is, that hæmorrhage of a serious nature is liable to occur. I admit this. I am sorry to say I have known of cases where most serious bleeding has occurred, and I have been informed of two instances where death ensued from this cause; but I maintain that when such accidents occur it is in consequence of an error on the part of the surgeon. He either uses a faulty clamp or allows a vessel to recede from the blades, so that it does not get touched by the cautery, or he applies the cautery inefficiently. I became a little careless after I had operated on a great number of cases, and did not take sufficient trouble to thoroughly cauterise the vessels, and I had about half-a-dozen cases of somewhat severe bleeding; but since then—now some five years ago—I do not let a single vessel escape without being well cauterised, and I have not been troubled by hæmorrhage at all. Stricture of the bowel may occur, but this is due to the too free removal of tissue, and especially of the skin about the anal orifice, and of course may be prevented. As a rule, after very severe operations, I advise the patient to use a bougie for a few weeks; this is a protection against any possible contraction.

Before concluding, I wish to say a word to you about the history of this operation. Those of you who have heard my remarks before will remember that I have always distinctly disclaimed having introduced this clamp and cautery treatment, and that I invariably give the credit of the origination of the plan to the late Mr. Cusack of Dublin, and you will find this statement in my Lettsomian Lectures;[1] but I have always claimed what merit there may be of improving the clamp in such a way that it can be used with the greatest efficacy and safety. Hence my name is associated with this means of treatment, and in nearly every important work on surgery the instrument as now used is described and figured as mine. I have also in my Lettsomian lectures, and in various papers, prominently drawn the attention of the profession to the subject, and, I believe, have been the means of getting the operation established as it is amongst surgeons both in this country and our colonies. I claim no other credit. I should not have mentioned this matter to you to-day were it not for the fact that an attempt has been made in certain quarters to ignore my claim to any little credit which my surgical brethren at large allot to me. The alleged dangers of this operation, too, have been spoken of in such a way as to lead one to suppose that the proceeding is attended with some considerable risk; but I need only repeat to you what I have told you before, that a fatal result has never happened in this hospital during the fifteen years in which the operation has been constantly performed, and under most adverse circumstances, and I have told you of the results of my private practice; so I must leave it to you to judge how far the operation can be considered a dangerous one. In fact, so far as I am concerned, the idea of danger as connected with this proceeding is not associated in my mind when I undertake a case of this kind, and so I honestly tell my patients when asked the question. For even in some of those desperately bad cases where the patients have been brought down to the lowest ebb by profuse hæmorrhage going on for weeks or months, and where some serious result might be anticipated, the safety and success of the operation by the clamp and cautery are more marked than in instances of much less severity.

[1] Fourth edition, p. 106.

THE result of the People's Subscription Fund in aid of the London Hospital during 1879 has, according to the report just issued, been the collection of the sum of £1908 16s. The whole amount collected in the twelve years during which the People's Fund has been in existence is £12,849. The produce of last year's efforts, therefore, shows a very gratifying proportional increase in the annual proceeds of the fund.

BEST COPY AVAILA

## A CASE OF RUBEOLA (ROTHELN).

By DYCE DUCKWORTH, M.D.,
FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS; ASSISTANT-PHYSICIAN TO ST. BARTHOLOMEW'S HOSPITAL.

INASMUCH as doubt still exists in the minds of many experienced practitioners respecting the peculiar and specific nature of rubeola, or German measles, it seems desirable to place on record all cases that may be met with. Wunderlich remarked that conviction in this matter could only be secured by the observation of distinct epidemics of the disorder. In Germany the distinctive features of rötheln are dogmatically laid down, and less doubt about its true nature appears to prevail there, than is the case either in France or this country.

If one dips into the literature of the subject, it is curious to note that a broad line divides the writings of those who plainly recognise the disease, from those who feel unable to assign to it a specific character as a distinct member of the exanthematic febrile group. This survey was ably made some years ago by no less shrewd and careful an observer than the late Dr. Murchison, who ably summarised the current opinions in a clinical lecture delivered at the Middlesex Hospital.[1] He gave in his own adhesion, without any hesitation, in favour of the existence of rötheln as a substantive and distinct exanthematic fever.

Under the titles of roseola, epidemic roseola, roseola æstiva, and rose-rash, the disease has been again and again described in English books, with but an imperfect appreciation of its true clinical features and affinities. Without doubt, too, many examples of it have been diagnosed as cases of mild or irregular measles, *morbilli sine catarrho*. Other instances have been described as illustrations of the joint existence of scarlet fever and measles, or the affection has been regarded as a hybrid of these two poisons. Mason Good described it as *rubeola incocta*. In France the distinction was recognised by Trousseau,[2] but he was in error in describing this affection as one unaccompanied with catarrhal symptoms, and in stating that the rash was not raised above the level of the skin. He called the disease roséole, and common measles, rugéole. Dr. Paterson of Leith was amongst the first to describe the disease in this country, and he has been followed by Dr. G. W. Balfour of Edinburgh, by Dr. Dunlop of St. Helier's, Jersey, by Dr. William Squire, and by Dr. Robert Liveing. Dr. Murchison's contributions I have already alluded to. In Sir Thomas Watson's "Practice of Physic" a short allusion to the disease is made; in Reynolds's "System of Medicine" the affection is not specifically recognised; but Dr. Bristowe, in his "Practice of Medicine," gives a good account of it. Medical officers to some of the public schools have had good reason to be impressed with the features of this affection, for it has often been prevalent in some of them during late years, and at Rugby and Harrow many cases have come under notice. "Harrow rash," indeed, had a disagreeable notoriety some years ago. Dermatologists in this country, with a notable exception in the case of Dr. Robert Liveing, describe the disease as a simple roseola.

Happily the disorder is in itself an unimportant one, in that it perhaps never destroys life, and, with the most rare exceptions, leaves no untoward sequelæ. Still, it is due to the spirit of work which prevails in medical science at the present time that the nearest approach possible to truth should always be made, and that each observer should contribute his quota to the common stock of knowledge.

The following case was carefully watched through its whole course, and these are the chief details of it:—

A. M——, aged eighteen, a robust youth, was in his usual health till 10 P.M. on Nov. 14th, when he felt "out of sorts" and more than usually tired, without any known cause. Slept well that night, followed his usual occupations (which were active) next forenoon, and took his meals as usual. About 1 P.M. on this day felt poorly, and had slight rigors. During the evening seemed tired and depressed, apparently suffering from slight cold. His face and neck were noticed to be rather red and puffy-looking. Slight pain and stiffness under the lower jaw was felt. Took a hot foot-bath, and was warm and perspiring on going to bed. Slight tightness at back of nose and throat. Draught taken containing sal volatile, chlorodyne, and ipecacuanha wine.

Nov. 16th.—Slept well all night. On awaking found himself covered with a rash all over the body. Seen at 9 A.M. Face and neck suffused, and skin over trunk and limbs injected and hot. An abundant, raised, crimson rash was found scattered on every part of the body. The general aspect was that of measles, with injected interspaces of skin between the papular patches. The axillary temperature was 101·4°. There were plainly visible crescentic arrangements of the measly eruption in many places. The face was less affected by papules, and was more generally erythematous and swollen-looking. It felt tight and stiff. The throat was sore, and looked red as far forward as the soft palate. The tonsils were enlarged and red, especially the left, and the lymphatic glands at the angle of the jaw were a good deal swollen and tender. Tongue fairly clean; papillæ natural; pulse regular, 84, good volume, quick, and sharp. Conjunctivæ suffused, but no lachrymation, no sneezing, and no cough. Voice rather hoarse. No action of the bowels; urine of fair quantity, clear, acid, void of albumen. During this day the rash was observed to vary in character, so that many of the small raised patches coalesced. On the back there was abundant eruption. A mixture, with aromatic spirit of ammonia in full doses, with chlorate of potass and a little ipecacuanha wine, was given each fourth hour. Milk and beef-tea for diet. Sponging, with "sanitas" and warm water. Vaseline relieved the discomfort of the face. 8.30 P.M.: Temperature 102·2°; 10 P.M., 101·2°. Submaxillary and suboccipital glands have enlarged during the day. The throat is less sore, but looks as it did in the morning. No pains or other noteworthy symptoms. The rash is not itchy, and is only uncomfortable on the face, which is universally red and swollen.

17th.—Passed a good night. To-day the rash is less obvious everywhere. The skin is universally injected and rubeoloid; slightly raised patches can be seen in most parts. The face is less full and stiff. Temperature 99·2°; pulse 64, of good volume. Tongue almost clean, throat less sore, fauces red, tonsils clean and uniformly red; velum punctiform with redness; skin moist. Bowels relieved thrice by Carlsbad salts. Glands enlarged, and slightly tender, at sides of neck, over larynx, supra-clavicular regions, also in the axillæ and groins. Relief to the throat acknowledged immediately after each dose of the medicine. In the evening the rash was less marked. Epistaxis, to the amount of about two drachms, occurred. Feeling of stuffiness in the nose; voice slightly hoarse. Temperature 98°. Urine deposited phosphates, alkaline, no albumen.

18th.—Passed a good night. Skin still injected, and the papular element faintly perceptible, of a yellowish-red hue. Throat red, clean; tonsils still enlarged; velum palati speckled with punctiform petechial spots. Filiform clot of dark blood on the pharynx, evidently from posterior nares. Pulse about 80 in sitting posture. Temperature 98·4°; conjunctivæ still suffused; tongue fairly clean. Right ankle aching, the site of a severe kick at football some four months ago; no swelling or undue heat in it. Urine acid, turbid with lithates, no albumen. Evening: Skin suffused, mottling apparent. Tongue thinly furred, and fungiform papillæ more obvious than before. Glands enlarged as much as yesterday. Pulse 56, temperature 99·4°. Ate some fish with relish; sat up for some hours.

19th.—Had good night. Skin suffused, and slight mottling obvious. Conjunctivæ less injected. Glands about the jaw smaller; same amount of enlargement in axillæ and groins. Throat not sore, fauces less red, voice not so hoarse. Punctiform aspect of velum less marked. Temperature 98·6°; pulse 60. Tongue cleaner, papillæ still distinct. Appetite fair; bowels open, motion solid. Urine acid, no albumen. Sat up ten hours.

20th.—Slept well. Skin, faintest mottling perceptible. Glands about jaw much smaller. Throat not red; trace of the mottling only on the velum. Tongue, thin general fur; urine natural. Temperature 97·6°; pulse 60 (sitting up). Ate some roast mutton. No pulmonary symptoms.

21st.—Going on well. Temperature 97·6°; submaxillary glands still large; all signs of rash subsided.

22nd.—Appetite good. Temperature 97·2°; pulse 56; tongue clean; throat and velum natural; little epistaxis; glands reduced in size; no sign of any desquamation. Had a carbolic acid bath. The mixed day-urine contains a

[1] THE LANCET, vol. ii., 1870, p. 595.
[2] Clinique Médicale, vol. i., p. 151.

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trace of albumen, *possibly* due to a pudding made with eggs, of which he partook freely to day. Evening temperature 98·4°.

23rd.—Out for a short walk. Temperature 97·8° (morning); urine loaded with lithates; faintest trace of albumen; tongue clean.

24th.—Temperature 97·5°; urine depositing phosphates on boiling; clearing with nitric acid. Pulse 60. Another carbolic bath.

25th.—Morning temperature 97°; evening 97·8°.

26th.—Glands about the same; urine deposits phosphates on boiling; no sign of desquamation except a little on lobes of each ear. Out walking to day; appetite good; tongue clean.

Dec. 1st.—Returned to his ordinary duties.

*Remarks.*—It was ascertained that this patient had sat regularly at table next to one of his fellows who sickened with what was termed "measles" sixteen days previously. This gives a somewhat longer incubative period than has been commonly recognised, ten to fourteen days being mentioned by most observers. No other communication of any kind existed before or after the illness of the first patient.

The prodromic period in this instance was something under thirty-six hours from the time of first poorliness to the manifest universal outbreak of the rash. The eruption is often the first symptom in many instances, but, not unfrequently, patients feel more ill and miserable during the short prodromal stage than at any subsequent period. This brief preliminary period is one of the best-marked characteristics of rötheln, and stands out in contrast to the seventy-two hours of the usual prodromic stage of true measles.

Moreover, the catarrhal symptoms, though certainly often present, are less marked than in measles. There are suffused conjunctivæ, but not commonly any lachrymation; stuffiness of the nose, but not sneezing.

Respecting the eruption, this is truly measly. Its rapid development is remarkable, and in this it differs from morbilli. The crescentic arrangement is appreciable, but the patches pass on quickly to develop and coalesce, thus becoming diffused, and somewhat resembling scarlatinal rash. The patches are certainly raised at first. As in measles, much rash is found on the back, and it often begins on this part or on the chest, and not on the forehead and face. The interspaces become rapidly injected, and, thus, the raised patches cohere, and blend into a uniform erythema.

In this case the temperature was highest during the greatest development of the eruption, and a rapid fall occurred on the fourth day. Subnormal temperature was observed for many days subsequently.

The albuminuria was noticed on the eighth day for the first time, and again on the tenth day, not having been examined on the ninth day. On the eleventh day it had disappeared. There was only a trace of it on each occasion.

Desquamation was only noticed on the ears, and in slight amount. No sequelæ ensued.

*A specially noteworthy point in cases of rötheln is the tendency to enlargement of the lymphatic glands about the jaw and neck.* Few writers have laid stress upon this symptom, and yet it is one of the most characteristic. It does not occur in true measles, and it seems to be somewhat disproportionate to the amount of irritation manifest about the throat. It may therefore be fairly attributed to the special influence of the fever poison. In their report of an epidemic at Harrow, Messrs. Hewlett and Bridgwater mentioned the occurrence of enlargement of the cervical glands.[1] Thomas, in his article in Ziemssen's Cyclopædia, gives a full account of it. It was well marked in the case just recorded, and the enlargement was here noticed to occur in the sub-occipital and submaxillary glands, while the axillary and inguinal lymphatics appeared also to be affected.

The diagnosis in this case was rendered more easy by my having attended the patient previously in well-marked and severe attacks of measles and of scarlet fever, the latter followed by nephritis and general dropsy, from which perfect recovery was made.

Grafton street, Piccadilly, W.

[1] THE LANCET, May, 1861.

WATER SUPPLY FOR YOUGHAL.—The Local Government Board for Ireland have sanctioned a loan of £6000, for the purpose of supplying this town with water.

# AURAL NOTES.

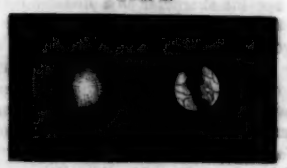
BY A. GARDINER-BROWN, F.R.C.S. EDIN.,
AURAL SURGEON TO THE LONDON HOSPITAL, AND LECTURER ON DISEASES OF THE EAR TO THE MEDICAL SCHOOL.

## III. IVORY EXOSTOSIS DEEPLY SEATED IN THE EXTERNAL AUDITORY MEATUS; REMOVAL.

THE case is that of a gentleman (J. S. C——, aged forty-five) sent to me last April by Dr. Stephen Mackenzie. He stated that during the last fourteen days he had experienced a very uncomfortable sensation in his left ear, which was becoming deaf. He was naturally alarmed at this, as he had lost the hearing on the left side, through measles, when a child.

Upon examining the right ear I found a deeply-seated exostosis, apparently spheroidal (Fig. 1), almost filling the meatus. He could only hear the watch on contact, but on

FIG. 1.

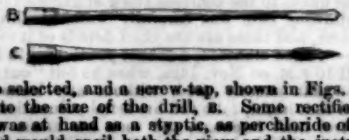


removing a small quantity of cerumen with the syringe the hearing greatly improved. Further investigation proved the exostosis to be growing from the posterior wall of the osseous meatus, its attachment, as far as I was able to determine, measuring six millimetres from above downwards. A fine wire loop (No. 28) could just be forced over, and partly around it. The growth was, however, too sensitive to bear much examination, as the soft tissues, becoming rapidly injected, now added to the difficulties of ascertaining the exact extent of the attachment. Touched with a probe it proved to be of extreme hardness, very dense, and tightly covered with a pale, thin membrane. The growth appeared to be somewhat sessile or subsessile; but this, after the extraction, proved only true of its outer portion. The shape of the growth was mammilliform, with its axis inclined forwards and outwards, as represented in the ideal horizontal section in Fig. 3. A little lead lotion was ordered to allay the sensitiveness caused by the examination, and to harden the surfaces for operation.

In the left ear were found *two* exostoses (Fig. 1), growing from the anterior and posterior walls respectively, but situated nearer the outer part of the osseous meatus, and entirely preventing any view of the membrane. A few vessels were seen meandering upon their surfaces. This ear, as already stated, was found to be quite deaf. Fig. 1 represents the view of the exostoses in the right and left ears, as seen through a large speculum.

It having been determined to remove the growth from the right meatus before absolute occlusion should have taken place, its density and depth from the surface led me to pursue the following course:—Three drills were made of the shape and length shown in Fig. 2, and fitted to an American dental engine. Two pairs of forceps (stump and bicuspid)

FIG. 2.

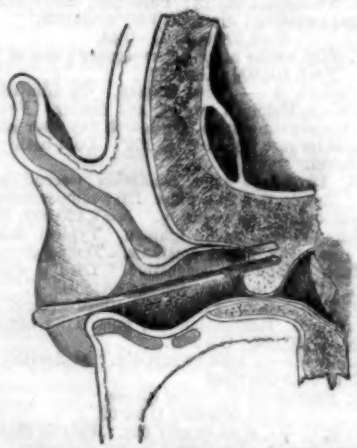



were also selected, and a screw-tap, shown in Figs. 3 and 4, adapted to the size of the drill, B. Some rectified spirits of wine was at hand as a styptic, as perchloride of iron or gallic acid would spoil both the view and the instruments, and ice was inadmissible.

The operation for removal of the exostosis from the right ear was performed on May 6th, at 10.45 A.M. An anæsthetic (chloroform two parts, sulphuric ether three parts, and rectified spirits of wine one part, mixed together) was now administered to the patient whilst sitting in a high-backed arm-chair.

When he was thoroughly under its influence, which occupied twenty minutes, the growth was further examined by those present and myself. I proposed to drill into the centre of the exostosis, fix into it the screw-tap, undermine it by drilling through its base, and then to snap it off by using the screw-tap as a lever. The periosteum was first cut through and torn away as far as was practicable; the blood, flowing very freely, was allowed to be unchecked for a few minutes, as the vessels of the head were much congested. The meatus was now rinsed with cold water, and a large speculum introduced well down upon the growth and plugged with cotton-wool. The boring apparatus was brought alongside the patient. Drill A was made to play

FIG. 3.

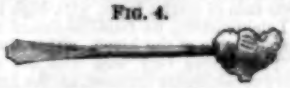


upon the centre of the growth, and kept in the axis of the osseous meatus, entering the bone to the extent of two millimetres. Drill B was now mounted and used to a depth of about six millimetres. Into this hole the tap was now firmly fixed, and the speculum removed. Having well cleansed the meatus, I made three separate drill-holes at the base of the exostosis, entering the bone to the extent of some seven or eight millimetres, and, in addition, tried to get drill C to work laterally, without, however, much success, the density of the bone and the clogging of the teeth with débris rendering it extremely tedious.[1] Thus weakened at its base by the drill-holes, and not suspecting the large area of its attachment internally, I thought to break off the growth by using the screw-tap as a lever. The tap unfortunately broke off close up to the bone without accomplishing this purpose. The pair of stump forceps were now used, but only enabled me to bring away a part of the growth containing the broken end of the screw. (See this line of fracture in Fig. 4.) The part of the exostosis now remaining, being more deeply seated, offered considerable difficulties in the way of removal. Strong traction directly outwards was made upon the auricle, with slight rotation to the *left;* and the bicuspid forceps, touched with oil externally, were introduced (closed), and rotated about a quarter turn to the *right*, accompanied by such a pressure into the meatus as to bring them down upon the remainder of the growth, but without pushing the tubular portion of the *auricle* into the osseous meatus, and thus encroaching upon available space. Opening the forceps as much as possible under the circumstances, taking advantage of the vertical diameter of the meatus, I obtained by a little manœuvring what was undoubtedly a firm grip of my opponent, and brought away the rest of the bony mass, not by traction, as I should thereby have lost my hold, but by a very delicate, yet firm, rotatory movement. The membrana tympani was now seen to be partly hidden by a flap of periosteum, which peeled off the inner surface of the growth during its extraction, remaining loose in the meatus. The greater portion of this was carefully taken away, its attached border being too close to the drum to warrant its entire removal, otherwise I should have been careful to get rid of the whole covering of the growth.

[1] During the boring process I kept my right or operating hand very firmly pressed against the side of the patient's head, so as to have proper control over the drills.

A front view of the entire exostosis is very faithfully portrayed of its natural size in Fig. 4. It measured eleven millimetres from apex to the extreme edge of base, which reached the annulus tympanicus; eight millimetres from

FIG. 4.



above downward, and seven millimetres in thickness. Smooth and irregular on its free surface. The shaded part in Fig. 4 represents an injury by the forceps. It is quite flat on its attached surface, except where channeled by drill-holes. It weighs ·237 of a gramme.

Soon after coming-to the patient vomited several times, and complained very much of pain in the lower frontal region. Did not feel more than a little discomfiture in the meatus, and could hear very fairly. Towards the evening he became very deaf, which lasted five days, much to his alarm. I had previously warned him of this effect, so that he was not so much discomforted as he might otherwise have been. The patient, who was of a plethoric habit, had taken saline aperients just before the operation, and was put on spare diet for a few days afterwards. Very little inflammatory action appeared in the meatus, which was cleansed four times daily with warm carbolic lotion (1 in 75). In a few days granulations appeared. These were first controlled by perchloride of iron, and afterwards by nitric acid. Not seeing the patient frequently after the first week, two of the granulations became sufficiently large to remove with a snare. The hearing was perfectly restored at the end of ten days, and on my last inspection, five months after the operation, scarcely a trace of the site originally occupied by the exostosis could be discovered.

There being no history of syphilis (acquired or otherwise) or hereditary predisposition, the growths are, no doubt, attributable to persistent irritation due to measles at an early age.

I believe from the cases of exostosis and periostosis of the external auditory meatus which have come under my notice, that when they are not of syphilitic origin the patient frequently possesses a more or less marked tendency to general hyperostosis or osteo-sclerosis.

The time occupied by the above-described operation, including the administration of the anæsthetic, was thirty-eight minutes. My thanks are due to Drs. Yeates and Wright, and Mr. Lloyd, for their very able assistance on the occasion.

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## A CONTRIBUTION TO CLINICAL HÆMOMETRY.

BY E. BUCHANAN BAXTER, M.D., F.R.C.P.,

PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS IN KING'S COLLEGE, LONDON; PHYSICIAN TO THE EVELINA HOSPITAL FOR SICK CHILDREN; ASSISTANT-PHYSICIAN TO KING'S COLLEGE HOSPITAL, ETC.; AND

FREDERICK WILLCOCKS, M.B.,

SANDBROOKE MEDICAL REGISTRAR TO KING'S COLLEGE HOSPITAL.

*(Continued from p. 323.)*

OUR observations may conveniently be grouped under three heads; first, those made in acute febrile diseases; secondly, in chronic diseases; thirdly, in those pathological conditions in which the blood is either the primary seat of the morbid process, or, at any rate, the theatre of its most conspicuous manifestations.

### A. ACUTE FEBRILE DISEASES.

*Scarlet Fever.*—I. Ernest C——, aged four, mild but typical case. Sore throat and rash. No complications.

Obs. 1. Fifth day of illness, two days after appearance of eruption, which is fully developed all over the body. Pulse 130; temperature 102°. N=4,670,000; G=0·61.

Obs. 2. Nineteenth day; temperature 98°. Free perspiration ever since. Rash faded twelve days ago. Constipation. No albuminuria. N=7,510,000; G=0·38.

II.—Samuel B——, aged sixteen. Typical rash and bad sore throat. No complications.

Obs. 3. Third day of illness. Rash universal. No sweating or diarrhœa. Pulse 128; respiration 30; temperature 104·4°. N=4,460,000; G=0·66.

Obs. 4. Nineteenth day, eleventh after complete defervescence, since when the temperature has been normal or subnormal. Peeling. Skin moist. No purging or albuminuria. N=6,400,000; G=0·41.

In the single case of scarlet fever, with high temperature, observed by Leichtenstern, he failed to detect any diminution in the hæmoglobin of the blood, either during or after the attack. This agrees very well with our results; for, although a very considerable increase in the number of corpuscles was observed to take place during convalescence, this increase was almost exactly balanced by a corresponding fall in their individual value, the absolute richness of the blood in hæmoglobin thus remaining nearly constant. The complete nature of the compensation is well shown by multiplying the figures representing the number into those representing the functional value of the corpuscles.

I. (1) 4,670,000×0·61=2,848,700.
(2) 7,510,000×0·38=2,853,800.
II. (3) 4,460,000×0·66=2,943,600.
(4) 6,400,000×0·41=2,624,000.

*Measles.*—Henry S——, aged twenty-five; typical case. Catarrhal symptoms with profuse sweating, which ceased when the rash came out; no complications; ran a mild course, ending in recovery.

Obs. 5. Third day of eruption, which is universal. Pulse 104; respiration 24; temperature 101·6°.
N=6,980,000; G=0·53.

Obs. 6. One week later: Defervescence complete; bowels confined; moderate sweating. N=6,160,000; G=0·59.

*Acute Rheumatism.*—John L——, aged sixteen. First attack; polyarticular inflammation with profuse sweating; loud mitral murmur; no pericarditis; pulmonary congestion; constipation; no albumen in urine.

Obs. 7. Fifth day of illness: Temperature 103°; pulse 104; respiration 36. N=5,970,000; G=0·73.

Obs. 8. A week later: Temperature 97°.
N=6,330,000; G=0·72.

*Acute Lobar Pneumonia.*—I. Lewis B——, aged twenty-eight. Consolidation of left lower lobe; sudden onset; high fever and delirium; no albuminuria; chlorides absent from urine; rusty sputa.

Obs. 9. Fifth day of illness: Delirious. Pulse 130; respiration 44; temperature 103·4°. N=5,310,000; G=0·66.

Obs. 10. Nineteenth day (eleventh since defervescence): Lungs have quite cleared up. N=5,720,000; G=0·57.

II. Fanny J——, aged twenty-one, a well-nourished and healthy girl. Consolidation of left lower lobe. Temperature 103° to 104°; rusty sputa; onset abrupt.

Obs. 11. Fifth day of illness: Sweating freely; bowels confined; pulse 112; respiration 30; temperature 101°.
N=5,840,000; G=0·51.

Obs. 12. Twentieth day (two weeks since crisis): Lungs clear; bowels confined; frequent sweating.
N=5,720,000; G=0·57.

In the first of these two cases there was a slight increase in the number of corpuscles, with a corresponding reduction in their individual value. In the second no material variation was observed. The result agrees substantially with that obtained by Leichtenstern in two cases of simple acute pneumonia. He noticed no decided diminution in the proportion of hæmoglobin in either of them.

*Typhus.*—I. Hannah L——, aged thirty; typical rash; high fever (103·2° to 105°); delirium; tremors; dry tongue; prostration; free sweating throughout. On the evening of the fourteenth day the temperature rose to 107°, and the urine was found to contain one-third albumen; ice pack. By the next morning the temperature had fallen to 97·2°, rising again in the course of the day to 99·8°. Death on the evening of the fifteenth day.

Obs. 13. Thirty hours before death: Skin dry and hot; pulse 150; respiration 48; temperature 105°.
N=4,190,000; G=0·71.

II. Mary F——, aged twenty-two; typical eruption; temperature 104° to 105°; pulmonary congestion; delirium; deafness; tremors; sordes on tongue. Recovery.

Obs. 14. Sixth day: Rash well out; skin dry and harsh; bowels relaxed; pulse 124; respiration 64; temperature 103°.
N=4,430,000; G=0·79.

Obs. 15. Fifteenth day: Bowels still rather relaxed; pulse 88; respiration 20; temperature 98·6°.
N=4,460,000; G=0·69.

In both of the above cases the proportion of corpuscles, both during and after the attack, was somewhat lower than normal, though the value of the individual corpuscles was not much impaired. It is as curious as it was unexpected to find how little the composition of the blood—as regards its red corpuscles and hæmoglobin—was altered in a most severe case of the disease, on the fourteenth day of its course, and only thirty hours before its fatal issue. And this in a malady which is commonly supposed—and probably with justice—profoundly to affect the constitution of the circulating fluid. We were unable to find any recorded observation on a case of typhus fever to compare with our own.

*Enteric Fever.*—I. Mary H——, aged seventeen; typical example of the disease, running its course in four weeks in a strong and healthy girl; delirium; rose spots; abdominal tenderness; high fever (104·6°). Recovery.

Obs. 16. Nineteenth day (?): Pulse 128; temperature 102°. Flushed and sweating; diarrhœa very moderate.
N=6,590,000; G=0·44.

Obs. 17. Five weeks after defervescence; out of bed for ten days. N=6,410,000; G=0·53.

II.—Elizabeth A——, aged sixteen. On admission rose spots, diarrhœa, abdomen swollen and tender. Fever very high; pulmonary congestion. On fourth day after admission the temperature rose from 105° to 106°. Cold baths; death; ulcers in ileum.

Obs. 18. Two days after admission (second week of disease?): Respiration 24; pulse 130; temperature 104·8°. Diarrhœa moderate; no sweating. N=6,420,000; G=0·53.

III.—John V——, aged eighteen. Typical case, with delirium, rose spots, slight epistaxis. Temperature 104° to 105°. Much pulmonary congestion. Died a week after admission. Ulcers in ileum, &c.

Obs. 19. Two days after admission (third week of illness): Severe diarrhœa. Respiration 32; pulse 112; temperature 104·2°. N=6,160,000; G=0·57.

IV.—Annie M——, aged twenty-six. Moderately severe case, with profuse diarrhœa.

Obs. 20. Fourteenth (?) day of illness.
N=5,060,000; G=0·69.

V.—Emily G——, aged twenty-one. Febrile disturbance with profuse diarrhœa for a week before admission. Enteric fever suspected; doubtful.

Obs. 21. Four days after admission: Eight loose motions during previous twenty-four hours. No sweating. Temperature 102·5°. N=6,600,000; G=0·45.

The general conclusion to be drawn from a consideration of the above observations is, to us at any rate, of an unexpectedly negative kind. Enteric fever, even when it immediately threatens life, does not appear to affect either the number or the quality of the red corpuscles to any marked extent. Hæmorrhage from the bowel would no doubt do so; but this is accidental, not of the essence of the disease. Substantially the same results were arrived at by Andral and Gavarret as regards the proportion of red corpuscles, and, more recently, by Leichtenstern, as regards the amount of hæmoglobin in the blood. In six cases of enteric fever, the latter observer examined the blood repeatedly, and found that "during the first, second, and third week, so long, in fact, as the fever lasts, the proportion of hæmoglobin undergoes no change." He adds, however, that in a majority of cases the subsidence of pyrexia is attended by a decided and rapid decrease in the relative amount of this constituent. Whether this "post-febrile anæmia," which did not show itself in the only one of our cases (Obs. 17) in which it might have been detected, depends on a hypocytosis, or a hypochrosis, or a combination of both, must for the present remain uncertain.

What strikes one most in looking over the series of observations comprised in the present group, is the very small influence exerted on the red corpuscles and the hæmoglobin by even the most severe febrile disorders, such as might naturally be supposed to modify profoundly the whole constitution of the blood. That the nutrition of the body generally is much interfered with by all fevers, especially by such as last for any time, is a commonplace. It may be, as Leichtenstern suggests, that the total mass of the blood, like that of the solid tissues, is uniformly diminished by the febrile process, without any material change in the relative proportion of its constituents. This hypothesis may serve, at all events, as a provisional explanation of what would seem, at first sight, to be altogether anomalous.

In marked contrast to the immunity of the red corpuscles in all the pyrexial disorders which have come under our

notice, is their liability to destruction in malarial fever. Kelsch's[1] observations on this subject, though published several years ago, do not appear to have attracted all the attention they deserve. They were made at the military hospital of Philippeville, in Algeria, where every variety of paludal disease is met with in great profusion. In his examinations of the blood he employed the numerator of Malassez; unfortunately, no parallel series of chromometric observations was carried out, so that it must remain doubtful for the present whether the hypocytosis was or was not accompanied by a corresponding degree of hypochrosis. The visibly profound anæmia displayed by the victims of ague, however, renders it highly probable that no sufficient increase in the value of the corpuscles occurs to counterbalance the effect of the great reduction in their number.

Numeration was employed in about 70 cases of paludal fever, and in many of them it was repeated daily throughout the course of the disease. The cases are grouped under the three heads of simple fever, malignant fever, and malarial cachexia. The most striking effect of the miasma on the corpuscles is manifested when a previously robust and healthy man is attacked for the first time. Under such circumstances the daily loss of red corpuscles may amount to several hundred thousand, occasionally to one million per cubic millimetre of blood in every twenty-four hours. This is during the initial period of the malady, when the symptoms are of a continued or remittent type. The initial period is usually of short duration, and is followed by a longer one, during which the fever is definitely intermittent (quotidian or tertian), and the number of corpuscles continues to decrease uninterruptedly, though less rapidly than in the first period. A succession of paroxysms will sometimes bring down the number of discs from the normal proportion of five or six millions to one million, or even to five hundred thousand, per cubic millimetre. As the blood is more and more impoverished, the process of destruction grows slower and slower, until at last, when the disease has entered on its third period, characterised by irregular febrile exacerbations, with more or less prolonged intervals of apyrexia, the number of corpuscles simply oscillates to and fro about an average minimum. At this stage a tendency may show itself to a very gradual restoration of the corpuscular elements; or their number may continue to diminish, though very slowly; or it may remain quite stationary for weeks together, notwithstanding the energetic use of quinine and iron, and the comparative infrequency of febrile paroxysms. This last condition is met with more especially in profoundly cachectic patients, with great enlargement of the spleen.

In the malignant form of paludal fever, the rapidity of corpuscular disintegration is proportionate to the previous good health of the patient. When he is a robust and well-nourished man, the corpuscles disappear at the rate of from half a million to one million per cubic millimetre in twenty-four hours; when his health has been broken by previous attacks, and he is already suffering from malarial anæmia, the daily loss varies from one to two hundred thousand per cubic millimetre. It is a noteworthy fact that the loss may go on, and may even amount to several hundred thousand corpuscles per cubic millimetre every day, while the axillary temperature continues normal; bearing no proportion, as it does in fever of the simple type, to the intensity of the febrile movement. On recovery from an attack of the malignant form, the restoration of the corpuscles is usually pretty rapid.

It is clear that in diseases of this class we have to do with some specific action of the paludal miasm upon the formed elements of the blood. Nothing at all resembling the effects just described has ever been noticed by ourselves or others in even the most acute febrile maladies which we have had an opportunity of studying. The destruction of the red corpuscles is not dependent on the pyrexia as such, though it probably stands in close relation to the melanæmia which is so frequent a consequence of the endemic fevers of marshy districts. It is to be hoped that those who enjoy suitable opportunities for the purpose will not fail to repeat Kelsch's observations and amplify them by the simultaneous use of the chromometer. We have not ourselves had a chance of examining the blood in even a case of ordinary ague, and are therefore unable to say how far, if at all, the conclusions stated above may be applicable to the very mild forms of malarial intoxication which now and then present themselves in our wards. Should those conclusions be substantiated, their practical value as regards both diagnosis and prognosis is too obvious to require detailed exposition.

*(To be continued.)*

[1] Contribution à l'Anatomie Pathologique des Maladies Palustres. Par A. Kelsch. Arch. de Physiologie, vol. ii., 1875.

CASE OF

# BILATERAL PARALYSIS OF THE MUSCLES SUPPLIED BY THE RECURRENT LARYNGEAL NERVE.

BY J. A. ORMEROD, M.B. (OXON.), M.R.C.P.

CASES of unilateral paralysis of the laryngeal muscles are, I suppose, tolerably common. Cases of bilateral paralysis of individual muscles, as, for instance, the posterior crico-arytenoids, are being recorded in increasing numbers; but bilateral paralysis of all the laryngeal muscles has hitherto, I believe, been but rarely observed. I therefore venture to publish an account of a case at present under my observation, albeit I have been unable to watch it from the commencement, and the termination of it still remains to be seen.

Von Ziemssen, in his "Cyclopædia of Medicine," mentions eleven cases, six observed by himself, the remainder by Türck, Traube, Münck, and Baümler. In three of these the paralysis was complete on both sides; in seven complete on one side, incomplete on the other; in one (a remarkable case, supposed to be caused by the pressure of a distended pericardium) the paralysis was incomplete on both sides. The cause was in four cases œsophageal cancer; in one cancer of the thyroid gland, in five aneurism. I find records of three other cases: one[1] by Ludwig Brieger in a phthisical patient; the paralysis complete on both sides; the cause (determined post mortem), pressure upon the recurrent nerves by enlarged lymphatic glands. And two[2] by Karl Kittler, in the first of which there was complete paralysis on the right side, with paresis upon the left, ascribed to aneurism; in the second, paralysis not quite complete on the left side, and paresis on the right; the cause undetermined, but supposed to be catarrh. It appears, therefore, that in the majority of these fourteen cases the paralysis was incomplete on one side, and that the cause was usually a tumour or aneurism.

The symptoms are so well described by Von Ziemssen that I need only recapitulate them. On laryngoscopic examination, the vocal cords are seen to occupy the cadaveric position, lying midway between the positions of phonation and deep inspiration, and not altering their position on phonation or inspiration. If the paralysis is incomplete on one side the cord of that side moves, but sluggishly and insufficiently, and it does not, as in cases of purely unilateral paralysis, compensate for the inactivity of its fellow, by crossing the middle line to meet it. There is absolute aphonia (at least in cases of complete paralysis), inability to cough with force, waste of breath on coughing or talking, so that prolonged talking puts the patient out of breath.

In the observation of the following case I have to acknowledge the help of Dr. Felix Sémon in pointing out to me some essential symptoms, and of Dr. de Havilland Hall, who also saw the case and agreed in the diagnosis.

Esther C——, aged thirty-eight, marked with small-pox and looking rather out of health, came to me at the Metropolitan Free Hospital in September last, complaining of cough and loss of voice, and of feeling generally out of sorts. The larynx was seen to be deeply seated, the ventricular bands were swollen and overhanging, the arytenoid cartilages a little larger than normal, and the right standing on a higher level than the left. The vocal cords were slightly congested, the right was quite immovable; the left moved but did not reach the right. The pharynx was slightly granular. The chest and neck were perfectly normal. She was treated with benzoin inhalation and iodide of potassium in doses of five to ten grains three times a day. Her appearance and general health improved, but the aphonia remained.

By November the symptoms of chronic laryngitis had subsided, and I was able to examine the patient under more favourable conditions. The following facts were then made

[1] Virchow, Hirsch, Jahresbericht, 1878.
[2] Schmidt, Jahrbuch., vol. clxxix., p. 167.

out:—There was nothing abnormal in the mouth, tongue, or fauces. The epiglottis was thickened, and there were some white spots of ulceration on it. The right vocal cord lay in the cadaveric position, and there was little, if any, appreciable movement of it, or of its arytenoid cartilage, during inspiration or phonation. The left vocal cord during quiet respiration appeared to be a little more abducted than the right. On deep inspiration the left cartilage and cord moved outwards to a certain extent. On phonation the left cartilage appeared to move inwards, the cord also made a slight motion inwards, but not to an extent corresponding with the motion of the cartilage; it appeared to become lax and bulge in its central part; it did not reach the right cord, or even the middle line. There was no anæsthesia of fauces or larynx. The epiglottis acted perfectly. The paralysis was entirely confined to the muscles supplied by the recurrent nerves. Prolonged talking put the patient out of breath. The chest and neck were re-examined, and again with a negative result.

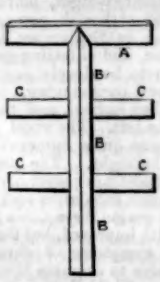
She gave the following history:—In November, 1877, she had a severe cold, cough, and hoarseness, and felt constitutionally ill. She was treated at the Ratcliff Cross Dispensary, and subsequently at the London Hospital, and improved; but in April, 1878, she caught small-pox, and during convalescence from this her voice got much worse. She also stated (but in answer to questions) that at the beginning of her illness she had a swelling in the left side of her neck, such as could be felt externally; and that swallowing food or liquid would cause choking and sneezing. Before her illness she had a particularly strong voice. No history of syphilis could be obtained. There was, therefore, very little from which to conjecture the cause of the disease. The swelling in the throat (an important item if it could have been verified by physical examination) only occurred to her recollection on being cross-questioned, and might, indeed, have been a simple tonsillitis. The laryngeal symptoms, so far as could be made out, had preceded the small-pox, though worse after it. The condition of the epiglottis was suggestive of syphilis, and the patient's general health had improved under iodide of potassium. It seemed right, therefore, to give this drug a fair trial, and she took it combined with tincture of nux vomica in doses increasing till half a drachm three times a day was reached. The induction current was also applied (percutaneously for the most part) twice a week. This treatment was continued till the middle of January. The result has been negative. The patient, indeed, thinks herself in better health, and maintains that her voice is improved, but to me it sounds as whispering as before, and there is scarcely any alteration in the laryngoscopic appearances.

Upper Wimpole-street, W.

## DESCRIPTION OF AN APPARATUS FOR THE TREATMENT OF DEFORMITIES OF THE LEGS IN RICKETY CHILDREN.

BY WILLIAM WEBB, M.D., F.R.C.S. ENG. & EDIN.

THE apparatus consists (as will be seen in the diagram) of a foot-piece (A), into the middle of which is firmly fixed, by screws, at right angles, a splint (B), which is well padded on both sides, and covered with flannel. To this splint the legs




are bound on either side by a light bandage, which can be the more readily adapted and kept in position by the aid of the cross-supports (C), which are firmly screwed to the back of the splint, and also padded. The apparatus may be worn in bed, during sleep, or when riding in a perambulator. It has been found effectual, after repeated trials, in restoring the normal contour of the bones in cases of external curvature, or rather cases in which the convexity of the curvature was on the outer side of the limb.

Wirksworth.

# A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

## GUY'S HOSPITAL.

### SURGICAL CASES ILLUSTRATING WOUND TREATMENT AND REPAIR.

(Under the care of Mr. BRYANT.)

THE subjoined report is continued from p. 364.

*Solid Bursa Patellæ; Excision; Recovery.* (From notes taken by Mr. Row.)—Susan B——, aged twenty-nine, was admitted into Lydia ward on Dec. 1st, 1879. Eight years before she had noticed a swelling on the top of the right knee. It was painted with iodine, and washed with a lotion, and got better; but a hard swelling, about the size of a filbert, remained. Eight months before admission the patient walked ten miles, and a few days after found the same knee very tender and slightly swollen.

On her admission she had a hard swelling, about the size of a walnut, just below the patella, freely movable, and not attached to skin or patella.

On Dec. 2nd, under chloroform, an incision an inch and a half in length was made along the outer edge of the patella, and the tumour was removed. The wound was washed with iodine, and dressed with terebine. The dressing was kept on for forty-eight hours, and a back splint applied. The bursa on section was nearly solid, having a good deal of yellow material in the centre.

On the 4th the wound was dressed. There was some suppuration, but no burrowing. There was a good deal of pain in the wound and up and down the leg. The bowels were confined. On the 17th she was discharged well. The wound was firmly closed.

The temperature never rose above 98·8° F.

*Congenital Myxomatous Tumour of the Hand; Partial Removal; Relieved.* (From notes taken by Mr. Dashwood.) Albert E. P——, aged six months, was admitted into Lydia ward on June 27th, 1879. He was a healthy child, but had a congenital tumour on the left hand, involving the thumb, back of the hand, and the first and second fingers, as well as the front of the wrist. The tumour had bled slightly twice during the last two or three weeks, and had increased in size. The tumour was elastic, and on the thumb was movable.

On July 3rd the temperature was 104·1°, but fell to 97·8° next day. On the 8th, under chloroform, an incision was made into the tumour parallel to the metacarpal bone of the thumb; the tumour was dissected out in pieces, and was found to be of a fibrous nature, containing fat. The edges were brought together with sutures. There was very little bleeding. On the 15th the wound was completely healed without constitutional or local disturbance.

*Ossifying Cartilaginous Tumour growing from Ungual Phalanx of Great Toe; Excision; Recovery.* (From notes taken by Mr. L. Stokes.)—Arthur J. W——, aged fifteen, was admitted into Job ward on May 22nd, 1879. About a year before the nail of the right great toe began to grow in, and the patient from time to time cut away the in-growing portion. Three months before admission a swelling came beneath the nail and gradually pushed the nail up. The nail came off, and the swelling increased in size.

On admission the right great toe was considerably swollen and inflamed opposite the last phalanx. The bed of the nail was occupied by a hard round swelling, about half the size of a marble.

On the 23rd, under chloroform, a scalpel was introduced round the edge of the growth, and the growth removed from the phalanx, to which it was found to be attached. The wound was dressed with terebine and oil. The growth was an enchondroma, springing from the phalanx and ossifying in the centre.

On June 8th the wound was not healing nicely; the granulations were large and flabby. On the 12th the growth was apparently reforming, and on the following day, under chloroform, the nail was pulled out of the cavity, scraped, and the wound compressed with a pad of lint. On July 16th the patient left the hospital. The "proud" granulations were cauterised; only a portion of the wound had granulated over. The nail was growing over the granulations. No signs of the growth recurring.

The temperature never rose in this case above normal. The growth was not an ordinary ungual exostosis, but a cartilaginous tumour ossifying in the centre embedded in the phalanx. Such cases are not common.

*Varices of Left Leg near the Saphenous Vein; Excision of Portion of Vein; Recovery.* (From notes taken by Mr. Duckworth).—Elizabeth W——, aged twenty-four, was admitted on May 3rd, 1879, into Lydia ward. The patient's mother had varicose veins. The patient had a large bunch of varicose veins on the inner and back part of the calf; there were also other varicose veins in the course of the internal saphenous vein along the thigh and leg. At about the junction of the middle with upper third of thigh there was a swelling about the size of a walnut. The swelling did not throb, and was most distinct and largest when the woman was standing, or on compression of the vessels above the swelling. It was a dilatation of the internal saphenous vein.

On the 16th, under chloroform, an incision was made over the dilatation and the vein, and, after it had been dissected out, it was tied above and below the dilatation. The included portion was then removed, and the part was washed out with iodine and water, and a pad of terebine lint was strapped over it. An incision was then made over the varix on the inner side of leg, and was similarly treated. There was much pain during the night. On the 21st the wound in the thigh was unhealthy-looking. The bowels had not been opened since operation. Castor oil was given.

On June 12th the wounds were nearly well. On the 21st an elastic stocking was ordered from sole to groin. The temperature only once rose as high as 100·8° F.—namely, on May 26th; it mostly ranged between 98·5° and 99·5°.

*Hæmatoma of Calf; Incision; Recovery.* (From notes taken by Mr. Palmer.)—Sarah S——, aged sixty, was admitted into Lydia ward on Nov. 6th, 1879. She had been knocked down by a cab, which passed over both legs. On admission, the right leg was severely bruised, and there was a large hæmatoma in the calf. No bones were broken. The posterior tibial artery could not be felt, but there was no coldness in the limb. There were other bruises, but nothing serious. The leg was put up in sand-bags. On the 10th the tumour was greener; there were two blebs on it containing fluid. On the 18th distinct fluctuation was felt in the tumour, which was softening; and next day an incision was made into it, allowing a quantity of uncongealed blood and small clots to escape. The cavity was washed with iodine-and-water. The patient suffered from slight pyrexia after the operation, as seen in the table, but as she had an herpetic eruption at the same time, and a cold, with no particular constitutional disturbance, it was not considered of importance. The highest evening temperature was 101·9°. The wound healed without suppuration, and the patient was discharged "well" on Dec. 17th.

Temperature Chart.—Nov. 20th: Morning, 98°; evening, 98·6°. 21st: Morning, 97·6°; evening, 99°. 22nd: 100°. 23rd: Morning, 99·8°; evening, 101·9°. 24th: Morning, 99·4°; evening, 100·6°. 25th: 99·3°. 26th: Morning, 98·6°; evening, 100°. 27th: Morning, 98·4°; evening, 99·2°. 28th: 98·5°.

(This series will be concluded in a future number.)

## MONTGOMERYSHIRE INFIRMARY.

### LARGE EPITHELIOMA OF THIGH IN A WOMAN AGED SEVENTY-SIX; EXCISION; RECOVERY.

(Under the care of Dr. PRATT.)

J. G——, widow, aged seventy-six, was admitted on the 4th September, 1879. She was suffering from a large epitheliomatous-looking tumour, occupying the anterior and internal surface of the middle third of the left thigh, extending six inches and a half in length by four inches and a half in breadth. The tumour was considerably raised above the surrounding surface, its edges were thickened and everted, and it was discharging a nasty-smelling fluid in abundance. The glands below Poupart's ligament were enlarged, but not tender. A small portion of the tumour was removed, and, being examined by the microscope, presented cells with a decided nested arrangement.

The history the patient gave of herself was that she had always enjoyed good health till about nine months ago, when a small wart appeared on her thigh. This she somehow injured when crossing a stile, and it began growing very rapidly. A medical man then applied caustic, and this made it increase with still greater rapidity. With the exception of the epithelioma, the patient professed to be in perfect health, but there was about her a certain cancroid appearance which betokened present and probably future degeneration.

On Sept. 10th excision was performed. The dissection was begun a good half-inch outside the edge of the tumour, and was carried right down to the sartorius and adductor muscles, which were laid bare, and every suspicious-looking part was carefully removed. Very little blood was lost, only a few cutaneous arteries requiring to be ligatured. The femoral vessels were felt immediately beneath the sartorius. At the end of the dissection a wound was left seven inches long by five inches broad. For the first two or three days this was dressed simply with carbolised oil and lint; afterwards it was dressed with strapping, and the edges approached as much as possible. The wound healed rapidly by granulation, and on Nov. 1st the patient was discharged with a healthy-looking cicatrix, seven inches long and one inch broad. The inguinal glands had diminished very much in size, and the general appearance of the patient had greatly improved. A fortnight further on she was reported as perfectly well.

## CUNNINGHAM HOSPITAL, ST. KITTS, WEST INDIES.

### CASE OF STRANGULATED FEMORAL HERNIA MASKED BY A MASS OF ENLARGED GLANDS; OPERATION ON THE FOURTEENTH DAY; RECOVERY.

(Under the care of Mr. A. P. BOON.)

A. D——, a negro, aged twenty-eight years, an agricultural labourer, complained of pain in the abdomen and vomiting, and stated he had not had a stool for six days. On examination the abdomen was rather distended, and there was general, but not great, tenderness. No hernia could be seen, but on the right side below Poupart's ligament a mass of enlarged glands was visible. This, the man said, had existed for some years. The glands were quite movable, and not tender or painful. The pulse was 80, temperature normal, tongue clean.

The treatment, which included various purgatives, enemata, opium, and belladonna in large doses, was of no avail in overcoming the intestinal obstruction. The case progressed slowly. On the eighth day the vomiting was stercoraceous. Soon after this the pain in the abdomen subsided, the pulse rose to 100, the tongue became foul, the countenance was haggard and anxious, and there were cold clammy perspirations. All this time he had passed neither fæces nor flatus. On the fourteenth day the condition of the patient was apparently hopeless.

In consultation with the late Mr. Boon, it was decided to cut down on the enlarged glands, draw them aside, and see whether there was a hernia under them. This was accordingly done, not with very strong hope of benefiting the patient, but rather to give him a chance. It was not until the glands were drawn aside that a small femoral hernia was discovered as large as the top of the thumb. The sac was opened, and contained a knuckle of intestine, the condition of which was not nearly as bad as might have been expected. There was some difficulty in dividing the stricture, but when this was done the hernia was reduced, and the case treated in the ordinary manner.

The patient passed a large motion a few hours afterwards, and recovered without a bad symptom.

*Remarks.*—This case is interesting on account of the hernial tumour being so small as to be completely hidden under the mass of enlarged glands, and the long period

(fourteen days) during which there was complete intestinal obstruction; notwithstanding which, the intestine was in a fairly healthy state.

# Medical Societies.

## ROYAL MEDICAL & CHIRURGICAL SOCIETY.

*Nephrectomy by Abdominal Section.*

THE ordinary meeting of this Society was held on the 9th inst., J. E. Erichsen, F.R.S., Esq., President, in the chair. A paper contributed by Mr. Arthur Barker, dealing with the subject of extirpation of the kidney, or, as it is more briefly styled, "nephrectomy," led to discussion which occupied the whole evening. The paper was an exhaustive review of the subject, and terminated with the relation of a case of cancer of the kidney, which the author had extirpated by abdominal section. In the course of the discussion Dr. Day and Mr. K. Thornton gave details concerning a case of hydronephrosis, in which the same operation was successfully performed, and the subject of this was shown to the Society. Mr. Clement Lucas related a case now under his care, and other instances of removal of kidney were mentioned by Mr. Wells and Mr. Cartwright.

The following is an abstract of the paper on "Nephrectomy by Abdominal Section," by Mr. A. E. BARKER:—The writer first sketches the reasons which induced Professor Simon, of Heidelberg, to plan and carry out in 1869 the first case of nephrectomy designedly performed on the human subject. He shows that Simon had been preceded by two American surgeons in the mere removal of the kidney. He points out the importance of Simon's experiments on animals, and his main conclusions therefrom—1. That this operation is as well borne in the first instance by the system as others now fully recognised, such as excision of the uterus or ovary. 2. That the sudden removal of one kidney does not so far affect the urinary functions as at all to influence the question of the operation. 3. That the health of the animal may be quite as good after as before, and without any uræmic troubles, hypertrophy of the heart, or other evils. The question as to whether these conclusions hold good for man is then shown to have been settled in many respects by the effect of the operation in Simon's first case, and in many since recorded. Of these the author has collected twenty-eight from home and foreign sources in which from various causes a kidney has been removed. These he tabulated under the headings "operator's name," "sex and age," "diagnosis or object of operation," "duration of complaint," "date of operation," "situation of incision," "form of dressing," "treatment of pedicle," "symptoms after operation," "result, immediate and eventual," "hæmorrhage after or at operation," "condition of organ removed," "remarks" on points of interest about the various cases. From this list two cases are first quoted which seem to prove more conclusively than any experiments on animals that neither the incision down to the kidney in the loin, nor the ligature of its pedicle and its removal, need cause any great disturbance in the system. In neither of these cases did this result. The organ in both had been wounded by a stab with a knife, and prolapsed, and was removed easily and without any ill effect. It was the study of these and a number of the others tabulated which led the writer to operate in the present case. He found that out of the twenty-eight attempted nephrectomies, six were done on a wrong diagnosis; in two for neoplasms the operation was left uncompleted, owing to difficulties experienced in the isolation of the organ. Of the remaining twenty undertaken with the distinct object of removing the kidney and completed, the objects were the following:—Two for fistula of the ureter, both successful; two for acute pain in the kidney (cause unknown), one death, one recovery; two for calculous pyelitis, both fatal; three for injury of the organ, two complete recoveries, one fatal; six for acutely painful movable kidney, four complete recoveries, two deaths; four for neoplasms (one obscure, however), one death, three recoveries; finally, one for pyonephrosis, perfectly successful. Of the whole twenty-eight, there are fourteen recoveries and fourteen deaths; but, excluding the six for wrong diagnosis, there are still thirteen successful and nine fatal; two of the latter, however, were desperate and left uncompleted. The causes of death were —peritonitis, four (abdominal section in all); pyæmia, one; in one, cause not given, patient died sixty-five hours after; in one the cause is stated to have been unexplained by the autopsy, "the patient died within a week;" two died of shock ten hours after operation (both desperate cases). In all the successful cases recovery was complete, possible recurrence in two excepted (neoplasms). Of the thirteen recoveries nine were lumbar sections, four ventral; of the nine fatal, five were lumbar, four ventral. On the whole, a careful examination of all the records convinced the author that nephrectomy is not accompanied by any peculiar shock or risks apart from those attending most grave operations, and that it is well borne in many cases; that as an operation it has a most useful future before it when we have learned to select proper cases and have better studied the operation itself. As to the mode of procedure, he would, from experiment on the dead body and careful comparison of those operations already recorded, feel inclined for the present to adopt the following conclusions:—The lumbar operation appears best suited for removal of healthy or comparatively healthy kidneys; also when there has been much perinephritic inflammation, old or recent; also for pyo- and hydronephrosis, and perhaps for the smaller new growths of the organ, especially if fixed. The ventral incision appears, on the other hand, best suited for taking away movable kidneys, whether healthy or affected with neoplasms, especially if the latter be large; also for the ordinary cysts of the organ not fixed by inflammation. The difficulty, in the case of the neoplasmata, of removing the lymphatic glands in and about the pedicle of the kidney (which are known to be an early seat of recurrence) by the lumbar incision, would influence him much in favour of abdominal section, by which the root can be better reached. The present case was as follows:—An unmarried female, aged twenty-one, had had lumbar pain for eight months before admission into University College Hospital. Three months before admission a medical man diagnosed a movable kidney. She suffered much from this time onwards from intense pain, with frequent nausea, and even vomiting and hæmaturia, preventing all work for considerable periods. All this was aggravated from the time of admission. Diagnosis: movable kidney, and possible new growth in it; later on, after observation, movable kidney affected with encephaloid. The hæmaturia was almost constant and often profuse during her fifty days' stay in hospital. The attacks of pain were very severe and she was much weakened. On Dec. 22nd, 1879, an operation was performed like ovariotomy in almost every respect—strictly antiseptic. Little difficulty was experienced in the ascending mesocolon, though this had to be done with the utmost care, as the tumour was very soft in places; ureter was tied separately; pedicle in two portions by transfixion, with twisted silk. The operation was almost bloodless. Patient bore it well, and showed little shock. Twenty-four hours later she was as strong as before the operation; eight hours later she began to get weak, with hurried breathing, as in attacks before observed; diagnosis, possibly thrombosis. Death occurred at the end of the second day. Cause discovered to be thrombosis of pulmonary artery. The autopsy showed the abdominal cavity to be all that could be desired; repair already far advanced; no trace of cystitis; no evidence of embolus from renal vein, but large thrombus firm and light-coloured in right ventricle of heart and pulmonary artery. Small secondary deposits in lungs and lumbar lymphatic glands; suspicious specks in liver; other kidney healthy.

The PRESIDENT said the paper was specially instructive in that it was, he believed, the first upon the subject that had been read before the Society; and its value was enhanced by the exhaustive survey of the history of the operation. The author had shown how the experiments and observations of Simon had proved the possibility of survival after the extirpation of one kidney, subsequently confirmed by the results of operations. An important point was the determination of the nature of the disease justifying the operation, and the diagnosis of renal from other abdominal tumours. Cases had occurred where the abdomen had been opened under the belief of ovarian tumour, and the operation abandoned on the growth being found to be renal.

Definite rules for the selection of cases also required to be established; and on these points they might well ask the opinion of physicians. Whether the removal of the diseased organ was to be effected by abdominal section or by lumbar incision was open to debate. Probably this would depend on the nature of the case. A mobile tumour was better removed by the abdominal section; a fixed tumour—e.g., calculous pyelitis—by the lumbar operation. He trusted the matter would be fully debated. He stated that Mr. Knowsley Thornton had brought to the Society a child from whom he had successfully removed the kidney some time ago.—Dr. DAY said that in January he showed to the Pathological Society the renal cyst removed by Mr. Thornton from the case just referred to (see THE LANCET, p. 58). The child was seven years of age, and came under notice in Oct. last with a large cystic abdominal tumour, of five years' duration. Her general health had not suffered at all; the urine was scanty, but natural. Various opinions were given as to the nature of the case, and Mr. Thornton drew off six pints of fluid by the aspirator, the fluid having the characters of urine, and being slightly albuminous. The cyst gradually refilled, and on January 2nd was removed by Mr. Thornton. The highest temperature after the operation was 101·6°. In reply to Dr. Southey, Dr. Day was unable to state whether urea was found in the fluid.—Mr. KNOWSLEY THORNTON said that having made the diagnosis of renal cyst, he confirmed this by the aspirator, and then suggested the advisability of its removal. He came to the conclusion that in such a case as that abdominal section was preferable to the lumbar operation, being strengthened in that view from finding in a case of pyonephrosis which he had incised about eighteen months previously, how difficult it would have been to secure the pedicle through the lumbar wound. One point laid stress on in the diagnosis of the case was the passage of the descending colon in front of the cyst, which, when distended, pushed between the layers of the mesocolon towards the median line of the abdomen. In operating he began his incision about one inch above and to the left of the umbilicus, and carried it down about an inch and a half below that part. He found afterwards that it would have been better to have made the incision about an inch higher. Owing to the child taking the anæsthetic badly, the vomiting and straining caused the intestines to appear at the wound, but this was the only difficulty encountered. After laying open the peritoneal capsule the cyst was shelled out, and its pedicle brought into view by drawing the cyst forwards. The renal artery and vein were first secured separately about an inch from the aorta, and then the whole pedicle embraced in a third ligature, as in Mr. Barker's case. The operation lasted nearly an hour and a half, and no shock followed. Immediately after the operation, temperature 97·8°, pulse 110, respiration 28. Much vomiting followed, and in the evening the temperature was 101·6°, pulse 150, respiration 32. For about the first twelve hours the urine passed was scanty, and contained much blood; but at 3 A.M. next day it was clear and deposited much urates. He found that the bloody urine did not decompose like that which contained no blood; for some days afterwards it was still free from odour and from bacteria. This seemed to indicate that the hæmaturia was really due to absorption of carbolic acid, and not to derangement of renal function from the extirpation of one organ. The child was up on the eleventh day after the operation, and had now just returned from a convalescent home. With regard to the general question of the method of operation, Mr. Thornton held that in cases of hydronephrosis abdominal section was to be preferred to the lumbar operation, as advised by Mr. Barker; but in cases where sinuses existed or adhesions, removal by abdominal section would be very difficult. The great advantage of abdominal section was that it allowed the operator to actually see the pedicle.—Mr. CLEMENT LUCAS considered extirpation of the kidney by either method to be perfectly justifiable; and it had been shown that one kidney could be removed without injurious effect. The choice of the operation must depend on the conditions of the case—e.g., it would be impossible to remove a large mass through the loin. The chief dangers were secondary hæmorrhage and thrombosis extending from the divided vessels. Did Messrs. Barker and Thornton cut the ligatures on the pedicle close?—Mr. BARKER and Mr. THORNTON replied in the affirmative.—Mr. LUCAS, continuing, said that if it were possible to see the renal artery, so as to grasp it well with forceps, then torsion should be employed. He could not understand why torsion was so little practised. At Guy's they did not know what secondary hæmorrhage was since torsion had been employed, and it could be safely applied to arteries as large as the renal. Three weeks ago he had excised a kidney by the lumbar method. The organ had been suppurating for six years, and the abscess had been opened by Mr. Howse. The man recovered sufficiently to go to work, but suffered much pain. The fistula in the loin remained open, and pus was passed in the urine occasionally. Six months ago some urine was passed through the loin. He was kept in the hospital for three months, and it was observed that when the sinus in the loin became blocked the quantity of urine passed from the bladder was not appreciably increased. This occurred several times and proved that the diseased kidney was not doing much work. Extirpation was performed as follows:—A vertical incision, as for colotomy, was made from the last rib to the iliac crest outside the quadratus. Great difficulty was experienced in detaching the organ owing to adhesions, and the incision was enlarged laterally to the extent of an inch and a half. The surface of the kidney was now exposed and ligatures placed round the pedicle, the vessels being tied separately from the ureter, and the organ removed. The case did well until a week ago, when hæmorrhage (apparently started by accidental manipulation) set in, and recurred in spite of plugging. Mr. Lucas reopened the wound, which was lined by granulations, and passed a loop round the pedicle. This not controlling the hæmorrhage, he, as a last resort, plugged the wound with two sponges soaked in a solution of perchloride of iron. There had been no recurrence of bleeding since then, and the patient was recovering from his anæmia. The sponges had not yet been removed.—Mr. SPENCER WELLS had seen Professor Simon of Heidelberg remove a kidney through the loin in a case of urethral fistula following ovariotomy. The case was successful. Mr. Wells had repeated the operation on the dead subject, and found but little difficulty in it. Mr. Barker had included in his tables a case of his own, which occurred to him ten years ago. It was a case of a large cyst of doubtful origin. An exploratory incision gave exit to a large quantity of bloody fluid, and Mr. Wells was obliged to remove the cyst. It had a capacity of fourteen pints, and seemed to be connected with the uterus. The kidney, which was adherent to the cyst, but was free from disease, was removed with this, the renal artery being secured by torsion. The patient only survived three days, dying probably from septicæmia, for it was before he had adopted antiseptic measures in his cases. There were no uræmic symptoms.—Mr. HAMILTON CARTWRIGHT instanced the following interesting fact as showing how much injury may be done to a kidney, and how little effect follow its removal. Some years ago, when in the Yang Tse river in China, he was shown by the doctor of an American vessel, also lying at anchor there, a specimen of a kidney. It had protruded from a wound in the loin, and had been dressed, according to Chinese fashion, with a mixture of bird's dung, saliva, &c.; and when the man was seen by the doctor the organ was in a state of putrefaction. Mr. Cartwright's acquaintance thereupon removed the mass, after which the patient, who had simply taken a pipe of opium during and after the operation, disappeared. He returned, however, in two or three weeks' time, and, as showing his appreciation of the services rendered him, brought with him another man suffering from cancer of the tongue.—Dr. HILTON FAGGE doubted whether the fatal result in Mr. Barker's case could be attributed to pulmonary thrombosis. In almost all cases in which such had been thought to be the cause of death he had found distinct evidence that the clotting was post mortem, in the gravitation of the corpuscles to the dependent parts of the clot. One may often find the right ventricle and pulmonary artery filled with nearly colourless clot, but in such cases some black clot will mostly be found in the lower stratum, or if not there at any rate in the auricle. He was persuaded that the colourless clot in the right ventricle was often only the upper stratum of a clot, the lowermost and coloured part of which was lodged in the auricle.—Sir JOSEPH FAYRER, on the other hand, was certain that pulmonary thrombosis was a frequent cause of death after surgical operations. In India this was notoriously the case. He had seen and recorded many instances where the most careful observation showed that such clots were found during life, and were the cause of death. Frequently gangrene was caused by clotting in vessels under these conditions, due, he believed, to

altered states of the blood.—Mr. HOLMES expressed surprise that no speaker had touched the cardinal point of Mr. Barker's paper—viz., the indications for operative interference in cases of rapidly-growing tumours of the kidney. In every other respect Mr. Barker's case was most successful; every care had been taken in the operation, and early union was taking place, but yet the operation was useless. The patient died more rapidly than she would if left alone, and the post-mortem examination showed that ultimate success would have been impossible, the cancer being already disseminated in the body. Was so formidable an operation really indicated in the case of such a malignant growth of the kidney with such severe symptoms? It might be that Mr. Barker was right in supposing that had the case been dealt with when it first came under notice, the chances of recovery would have been enhanced, owing to the disease being less advanced; but do such cases really offer sufficient prospect of success to justify the measure of extirpation?—Mr. BARKER, in reply to Mr. Thornton, admitted that the question whether hydronephrotic tumours would be dealt with preferably by lumbar or abdominal incision was an open one. He suggested the former method as the more applicable, because of the greater ease with which such cysts could be well drawn through the loin, as compared with other renal tumours. That the death was due to pulmonary thrombosis was only an hypothesis arrived at by exclusion of other evident causes. Whether the operation were justifiable in such cases must be left for the future to show. Still, there was the case operated on by Professor Martin; also one of encephaloid cancer, where the patient was well a year after operation. Professor Martin has lately informed him that there is some indication of recurrence now taking place, but it is not certainly established to be so. Even if the disease be recurring, yet the patient's life had undoubtedly been prolonged and eased by the operation. Mr. Jessop's patient survived some months, and it was not known with certainty that death was due to recurrence of the growth.

The Society then adjourned.

## PATHOLOGICAL SOCIETY OF LONDON.

*Pulsating Tumour of Cranium.—Degeneration and Regeneration of Axis-cylinder in Non-traumatic Lesions.—Tropical Ringworm.—Fatty Tumour.—Primary Cancer of Liver.—Hypertrophy of Masseter and Temporal Muscles.—Sclerema Neonatorum.—Cancer of Stomach.—Abscess in Head of Tibia.*

THE ordinary meeting of the Pathological Society of London was held on the 2nd instant, the President, J. Hutchinson, Esq., in the chair. Before the commencement of the usual business of the evening the President announced that the Council of the Society had appointed a committee to draw up a list of subjects which particularly required elucidation, and of conditions of which it was desirable to show illustrations. This list was not intended to restrict the exhibition of specimens, but rather to act as a guide to the younger members. He hoped that anyone who felt particular interest in any special subject would mention it to the secretaries, who would be glad to receive any suggestions. The meeting was prolonged beyond the usual time for the exhibition of two recent specimens.

Mr. H. MORRIS showed a Tumour of the Cranium, which was obtained from a woman who first came under his care at the Middlesex Hospital, in August, 1874, being then forty years of age. Two years previously she fell and struck her head, and a small blood tumour appeared, but vanished next day. A month later she noticed a small hard tumour over the left parietal bone, which in 1873 attained the size of a small apple. A second similar lump then rose up, and soon blended with the first. For two months before admission she had suffered from headaches. When he first saw her there was a very prominent, soft, pulsating tumour reaching to the middle line at the vertex, and forwards to the ending of the hairy scalp; it was fixed to the skull. Around its circumference a hard, raised rim of bone was felt; the skin was marked with distended veins, was freely movable over the tumour, and not ulcerated; pressure upon it caused no discomfort; there were occasional flashes of light; eye normal; cervical glands not enlarged. The tumour was punctured with a needle, and only a little blood escaped. In August, 1874, an expansile tumour was discoverad just above the top of the sternum; no difference could be detected in the radial pulses. Dr. Coupland then examined the patient, and discovered a systolic murmur at both the apex and base, and found the apex beat abnormally near the left nipple; no increase of cardiac dulness. In December the tumours had grown a little, and the hard ring round the one on the head could only be detected in places; the temporal and supra-orbital arteries of both sides could be felt enlarged, and pulsating forcibly. In January, 1875, Dr. Greenhow found the systolic murmur at the base of the heart rougher and more pronounced and conducted up the carotids. The tumours slowly increased in size, and in November, 1878, another was noticed at the top of the right thigh, smooth, soft, and pulsating, and apparently produced by the expansion of the upper end of the femur; later on another was noticed in the left thigh; all the growths became extremely painful, and death occurred in October, 1878. At the autopsy a fifth tumour was discovered near the inner condyle of the right femur, and the thigh was rotated in as if dislocated. The bloodvessels of the neck were very large, and the heart also was hypertrophied, but free from valvular disease. The tumour in the neck was found to be within the inner end of the clavicle, but not implicating the sterno-clavicular joint. A section through the tumour of the parietal bone showed that it was limited by the pericranium on the outer side and the dura mater within, and that springing from the diploë the tumour had spread out on both aspects of the skull, especially on the outer surface. In the centre the parietal bone was perforated for about an inch and a half, and the diploë was encroached upon more than either table of compact tissue; the tumour was growing over and not from the compact tables of bone. There was no sign of inflammation of the brain. The specimen was brought forward on account of the long duration of the growth, six years, the accompanying hypertrophy of the heart, and because Mr. Morris desired the Morbid Growths Committee to report upon its structure. Several competent microscopists had examined it, but had been quite unable to agree upon its real nature.—Dr. BRISTOWE stated that he had under his care a year ago a woman, between thirty and forty years of age, admitted into the hospital for shortness of breath and general debility. Quite accidentally a tumour was found to replace the right scapula; it felt like a bag of worms, and was evidently a congeries of large vessels; a similar growth was found in each buttock; a systolic murmur was audible over each of these growths. Examined after death they were found to be sarcomata. At the request of the President, Dr. Bristowe promised to exhibit the specimens to the Society.—Dr. THIN, premising that this was the only opportunity for discussing the structure of the tumour, stated that he had carefully prepared and examined several sections of it. The tumour consisted of cells, cavities, and a matrix. He traced the formation of the cavities from large globular cells with distinct nuclei. The first change was a division of the body of the cell into smaller cylindrical cells, the nucleus then disappeared, and a cavity lined by hexagonal or polygonal cells remained. If these secondary cells are epithelial, then the growth is glandular, but it is difficult in that case to trace its origin, as it did not resemble the growths from the sweat glands which sometimes pierced the bones, and if the growths in the other bones were the same structure, this difficulty was still greater. Dr. Hamilton, of Edinburgh, was of opinion that the cells were epithelial; he, Dr. Thin, however, was not. The matrix of the tumour was very firm, and could readily be cut in thin sections, even after soaking in water; it also stained deeply with logwood and not with carmine, and thus resembled cartilage and not fibrous tissue. The undoubted fibrous tissue around and within the tumour stained as usual well with carmine. The association of epithelial and cartilaginous growths was unheard-of and could hardly be conceived.—Mr. KNOWSLEY THORNTON asked what the opinions of others who examined the growth were. He thought Dr. Thin's specimens showed the origin of cysts from a single cell, and he thought the cells were secreting epithelial cells, especially as in some places the spaces were tubular.—Mr. R. PARKER had examined several glandular tumours of the scalp, and thought this was of similar structure, but the cells were not quite so

well mapped out, possibly owing to faulty preservation of the tumour.—The PRESIDENT stated that the Morbid Growths Committee would examine and report upon the specimen, and that it was a rule of the Society that no discussion could take place on that report.—Mr. MORRIS stated that some of his friends had thought it a myxoma, others a cystic enchondroma, others again glandular, some called it a sarcoma or angeioma; and when many competent observers were at such variance, he thought it best not to express any view of his own. He was greatly indebted to Mr. Couling and to Mr. Morris, of Brighton, for notes of the later progress of the case.

Dr. HOGGAN exhibited some microscopical specimens to illustrate the Degeneration and Regeneration of the Axis-cylinder in Non-traumatic Lesions of Nerve Fibres. He thought that the results obtained by direct experiment were vitiated by the irritation of the nerve by the section. He had studied the process in gangrene affecting cutaneous nerves, and had arrived at different results from those hitherto described. At present Ranvier and his school held that after section the axis-cylinder between the cut and the next node on the central side did not degenerate, but Engelmann and others taught that the axis-cylinder did degenerate on each side of the section. Dr. Hoggan found that at a distance from the gangrene and where the segmental elements were quite healthy, the axis-cylinder broke off and curled up in a spiral, and to such an extent that several segments may intervene between the two ends. When regeneration occurs this spiral uncoils itself and passes into the new segments. Often, however, the axis-cylinder does not break off beyond the gangrene, and when this is the case the appearances are such as to suggest the existence of a central axis cavity, filled by a soft fluid material, which undergoes spurious vacuolation and swells; the outer portion at the same time becomes granular, and is pushed up to the bulbous ends of the segments; these bulbs sometimes burst and quite disappear. He failed to find any regularity in the level at which these changes occurred even in the fibres of the same nerve; the withdrawal of the axis-cylinder preceded the other changes.

Dr. THIN showed under the microscope the Fungus of Tropical Ringworm, and exhibited drawings of his specimens. Some years ago Hebra drew attention to a disease occurring on the skin of the perineum and scrotum, which he named eczema marginatum; soon after Kübner found a mycelium in the ring, and stated that the disease was really tinea circinata modified by the moisture of the situation, and this view has since been generally adopted, though Hebra still maintains that the two forms of the disease are clinically distinguishable. Dr. Thin greatly questions the accuracy of this view, and a few years ago published two papers in the *Practitioner*, in which he advocated his opinions and stated that dermatologists were scarcely competent to pronounce upon the exact similarity or the reverse of fungi. He mentioned the case of a gentleman who suffered from the disease for twelve years, and then was apparently cured, but a short visit to Singapore quickly caused it to reappear. Dr. Manson of Amoy, China, has lately been working at the subject, and has succeeded in inoculating ordinary tinea circinata on one arm, and this disease on the other arm of a Chinaman, and he has found that the fungi thus grown are distinct, and on repeating his inoculations has found that each of them always breeds true. Dr. Thin examined some scales from a case which were sent to him by Dr. Manson, and he found that the mycelium and spores varied in size much more than those of tinea circinata—from much larger to much finer. The disease occurs most often about the Straits of Malacca.—Dr. BRISTOWE had lately seen a lady, about sixty-five years of age, with thickening of the nails on three fingers of one hand and two of the other, which had existed for seven years, and came on while she was attending a grandchild suffering from ringworm of the head; the nails were loaded with the usual ringworm fungus. This case showed that tinea circinata had sometimes a very long existence.—Sir J. FAYRER had seen this affection very often in India, and had noticed that it was always worse in the moist climate of Calcutta than in the drier regions, and was particularly prevalent in Burmah and all over the Malay Peninsula. He had not noticed that it was different from common ringworm—like it, it was easily cured by three or four applications of the goa powder; he had seen several cases of the disease since his return to England, and they too had speedily yielded to this treatment.—The PRESIDENT asked if Dr. Thin meant that all cases of ringworm in the tropics were due to this fungus, or did the fungus affect only one part of the body? It was necessary to be precise in the use of terms, and he thought the term "tropical ringworm" misleading. He was certain that some of the cases of the eczema marginatum he had seen were really common ringworm: thus a lady consulted him for the affection of the genitals, which came on four years before while she was attending to the head of a child with tinea tonsurans.—Dr. THIN did not mean that all cases of ringworm in the tropics were produced by this fungus. He had found the disease very troublesome to treat; it was easy to cure it temporarily, but it generally relapsed. If away from the perineum, this form of ringworm is more like syphilis than anything else. One important distinction from common ringworm is, that it creeps around hairs, but does not spread down their shafts nor lead to their destruction.

Dr. PYE-SMITH showed a specimen of Primary Cancer of the Liver. It was removed from a boy fourteen years of age, who first came under his care at Guy's Hospital two years ago. Two months before, he fell and struck his right side, and soon after noticed pain and fulness over the liver, the swelling increased, and when he saw him there was evident bulging, and the liver was felt some inches below the ribs, smooth and at one part so elastic that he tapped it with the idea that it might be hydatid disease. He entered the hospital a second, and then a third time, and was tapped once again, but nothing but a little blood escaped. Three days before death he took to his bed, his temperature rapidly rose to 104°, and he became deeply jaundiced. At the autopsy an enormous cancerous infiltration of the right lobe of the liver was found, the organ weighing 200 ounces. Large soft yellow masses were seen growing into the large hepatic veins. With the exception of one small nodule of cancer in one lung, all the rest of the body was quite healthy. It was then a primary cancer of the liver, which was extremely rare. Microscopically examined it was seen to be a carcinoma, with epithelial-like cells packed in fibrous alveoli, and of the variety called malignant adenoma. In some places the structure was almost a repetition of the liver itself, but the cells were arranged irregularly, not in columns. The specimen was of interest from its rarity, the youth of the patient, the length of time during which there were no grave symptoms, and the rapid and great pyrexia just before death, for which there was no obvious cause.

Dr. WICKHAM LEGG showed a girl with marked enlargement of the Masseter and Temporal Muscle on one side. It had been noticed about a fortnight; there was no loss of power in the muscles, which responded well to faradaism, but not to galvanism. There was no enlargement, nor loss of power in any of the other muscles of the body. These muscles had been seen affected in the later stages of pseudo-hypertrophic paralysis; but, as far as he knew, there was no instance recorded in which the disease began in them, and he was therefore unwilling to give that name to this case, but he should wait and watch its development. There was no history of syphilis in the case, nor of Duchenne's disease in the family. He stated that, like hæmophilia, and sometimes gout, polydipsia, and colour blindness, Duchenne's disease is seen only in the male members of families, but is transmitted by the females to their sons.

Dr. STEPHENSON showed the body of an infant ten weeks old affected with Sclerema Neonatorum. He was requested by the coroner to make a post-mortem examination, and was assisted by Dr. Barlow. The body at first appeared to be frozen, for the parts in which there was fat were quite hard, while where fat was absent they were flaccid and soft, and decomposition was commencing. The internal organs were quite healthy, with the exception of collapse of part of one lung. The sclerema did not exist at birth, and he had been unable to learn that it had been noticed at all during life. The disease appeared to be a substitution of palmitine for olein in the fat, rendering it solid at a higher temperature.—The PRESIDENT remarked that such a condition could hardly escape the notice of the nurse during life.—Dr. BARLOW had seen quite the same condition in a still-born child, and in another seven weeks old. It was nearly the same disease as that seen in children four or five years old. It differed from the sclerema neonatorum of French authors in being waxy from the very beginning, and not occurring as bluish-red patches; he had seen a case of this form. In Paris he saw a young child which answered closely to Dr. West's description of the affection, where there was great marasmus with very

low temperature, and on post mortem the fat was not solid, but a very little reddish serum could be squeezed from it. These varieties of sclerema should be distinguished.—Dr. N. MOORE thought the form occurring in infants was always attended with marasmus; but that met with later on was not. He had seen the ear affected in a child of five or six.—Dr. DOUGLAS POWELL asked what was the cause of death? Is this condition of the fat fatal?—The PRESIDENT stated that the children are exceedingly ill at the onset of the disease, and perhaps this child died at that stage; usually the extreme illness passes off.—Dr. STEPHENSON stated that it was nearly always fatal at this early age.

Mr. BARROW showed a fresh specimen of Colloid Cancer of the Stomach, removed that day from a patient under the care of Mr. Butcher. The gentleman from whom it was removed had suffered from general wasting and loss of appetite for two years, and he died of exhaustion without exhibiting more definite symptoms. The stomach was adherent, and the lymphatic glands very large and hard. It was alveolar in structure, with colloid cells.

The following card specimens were exhibited:—Pedunculated Fatty Tumour growing from Ilium, by Mr. WALSHAM; Abscess in Head of Tibia, by Mr. FURNEAUX JORDAN.

The Society then adjourned.

## MEDICAL SOCIETY OF LONDON.

*Annual General Meeting.—Epithelioma of the Penis.—Pudendal Erythema in Diabetes.—Stricture of Bile-duct.*

THE general meeting was held on the 1st inst., Dr. Cockle, President, in the chair. The Hon. Secretary read the report of the Council, in the course of which it was stated that the Council had awarded the silver medal of the Society to Dr. Gowers for his admirable demonstration on diseases of the spinal cord. The Fothergillian medal has not been awarded. Other reports were read, and the subject for the next Fothergillian prize essay was announced—viz., Whooping-cough, its Pathology and Treatment.

The ballot having been taken, the following gentlemen were declared duly elected to their several offices for the session 1880-81:—President: Mr. F. J. Gant. Vice-Presidents: Dr. C. Theodore Williams, Mr. W. F. Teevan, Dr. Alfred Wiltshire, Mr. J. W. Barnes. Treasurer: Mr. Francis Mason. Librarian: Mr. H. Royes Bell. Secretaries in ordinary: Mr. D. H. Goodsall, Dr. T. Gilbart Smith. Secretary for foreign correspondence: Dr. J. I. B. Berkhart. Council: Mr. J. Astley Bloxam, Dr. Percy Boulton, Mr. Thos. Bryant, Mr. R. Brudenell Carter, Dr. John Cockle, Mr. Walter Coulson, Mr. A. E. Cumberbatch, Dr. W. H. Day, Dr. T. S. Dowse, Sir Joseph Fayrer, M.D., Dr. Clement Godson, Dr. F. de Havilland Hall, Mr. Thomas Harvey Hill, Dr. Constantine Holman, Mr. Malcolm Morris, Mr. Edmund Owen, Mr. H. E. Sewill, Dr. Heywood Smith, Dr. J. C. Thorowgood, Dr. L. S. Forbes Winslow.

Dr. HARE took occasion to make a few remarks, which he said, "though somewhat of a personal nature, would, he trusted, have a wide professional hearing." He referred to his attack of typhoid fever, which he had no doubt he contracted at Homburg, five cases of typhoid having occurred at the hotel he stayed at. He left Homburg on Sept. 25th, and reached Vienna on Oct. 4th, after staying a few days at Nürnberg and Munich. With the exception of slight gastro-hepatic derangement one day at Munich, no symptoms showed themselves till Oct. 8th, so that the incubation period must have been at least fifteen days. He referred in the warmest terms to the extreme kindness, attention, and care he had received from the Vienna physicians, Dr. Finck and Dr. Bamberger. Dr. Hare then referred to some of the leading symptoms of this attack, and especially to the relief obtained during the earlier period by the application of a few leeches to the temples, which were allowed at his own earnest solicitation, and as a "concession."—The PRESIDENT, in the name of the Society, thanked Dr. Hare for the lucid account of his recent illness, and assured him it afforded the Fellows much satisfaction to have him among them again.

Mr. PEARCE GOULD read notes of a case of Epithelioma of the Penis. The disease occurred in a man aged seventy-five, who for five years had noticed a black growth on and behind the glans penis. On admission into the Westminster Hospital in July last there was one large pendulous growth, obscuring the glans penis and several smaller sores above it. All were deeply pigmented. No enlargement of inguinal or iliac glands. The penis was amputated, and the patient made a good recovery, the *modus operandi* consisting in the formation of a flap of corpus spongiosum and urethra, and then division of the corpora cavernosa by a wire écraseur.—Mr. ROYES BELL thought that amputation was the proper course to pursue in such subjects, and recalled a case of Sir W. Fergusson's where the diseased part was shaved off, but speedily recurred. Several excellent microscopical preparations of the tumour, made by Dr. Heneage Gibbs, were exhibited. Dr. Gibbs also showed the stereoscopic effect with a high power.

Dr. PERCY BOULTON read notes of a case of Pudendal Erythema due to Diabetes, suggested a neurotic rather than a urinary origin for the rash, which occurred also in the axillary regions. He drew a parallel between the functions and character of these two seats. In the case given, codeia internally and the local application of morphia and vaseline were very successful.—Dr. DE H. HALL remarked that in all cases of diabetes in women that he had seen, there was more or less vulvitis, which he attributed to the mechanical effect of saccharine crystals.—Mr. GOULD suggested that the sugar might escape in the sweat.—Dr. HARE had found prurigo of the vulva successfully treated by the application of an ointment containing calomel (one part to four) at night, the part then to be dusted with camphor and starch powder.—Dr. ROUTH asked whether Dr. Boulton's patient was not of an age when prurigo vulvæ is liable to occur.—Dr. BOULTON replied in the affirmative.

Dr. DEWAR read notes of a case of Jaundice, with Perforation of the Duodenum. The patient was an artist, aged sixty-one. The jaundice came on rather suddenly some weeks after a chill, the symptoms being pain and vomiting. The stools were clay-coloured, and the urine brown. There was never any colic, and no evidence of malignant disease about the liver. There was tympanites, with some ascites. The gall-bladder could not be felt externally, and the hepatic dulness was slightly diminished. Four months after the first appearance of the jaundice, and without any apparent cause, some pain came on in the hepatic region, and death occurred in twenty-four hours from perforation of the duodenum, in the centre of a thickened and inflamed patch in the neighbourhood of the opening of the common duct. The duct was quite impervious, blocked by organised deposit; and the inference was that the case was one of duodenal catarrh, extending up the common bile-duct, and leading to its thickening and obstruction.

## SOCIETY OF MEDICAL OFFICERS OF HEALTH.

*Etiology of Summer Diarrhœa.*

AT a meeting of this Society, held at 1, Adam-street, Adelphi, on Friday, February 20th, president Dr. Bristowe, Dr. G. B. LONGSTAFFE read a paper entitled "Some facts bearing on the Etiology of Summer Diarrhœa," of which the following is an abstract:—All are prepared to admit that many circumstances may predispose to diarrhœa, such as the character of food, foul air, bad water, high temperature, overcrowding, &c.; but it is at least not improbable that there exists some special or specific cause, at present unknown, which must be superadded to one or more of the predisposing causes. This specific cause may be a meteorological condition, a peculiar form of pollution of air or water, some animal or vegetable matter in a state of change, or even a living germ. The method of inquiry employed by Dr. Longstaffe necessitates the limitation that when diarrhœa is mentioned it must be understood that fatal diarrhœa is meant, because the arguments to be brought forward are all derived from the statistics of death collected in the Registrar General's office. It is important to obtain satisfactory replies to the three following questions—where, when, and how does it kill? The average death-rates of the ten years ending 1879 show that the average summer diarrhœa death-rate over the whole of England and Wales is 2¼ per 1000, in the fifty other towns of the Registrar-General a little below 3 per 1000, while nearly 1 per 1000 higher than that of the twenty largest towns of England. The death-rate of all the rest of the country—that is, of the registration districts not included in these seventy towns—is 1½ per 1000. Diarrhœa in the summer

is, therefore, twice as fatal in the fifty towns, and more than twice as fatal in the twenty towns, as it is in the country districts. When the death-rate of the several towns is investigated, very striking differences come to light. Thus the death-rate in Leicester is over 8 per 1000, Preston 7 per 1000; next to Preston come Salford, Leeds, Hull, Yarmouth, Bolton, Liverpool, and Birmingham. The London rate is almost exactly the same as those of the fifty towns. When the seventy towns are arranged in the order of their summer diarrhœa death-rate, the twenty towns at the top of the list are found to have an average rate of 5·2, while the twenty towns at the other end have an average of only 1·8. What factor in common have the twenty towns comprising one group, which being absent in the twenty towns comprising the other group, causes the latter to have a diarrhœa death-rate of little more than one-third that of the former? Density of population is not the common factor; the geological system upon which a town stands appears to exert no influence, although porosity of soil may be of importance. Elevation above or proximity to the sea is without effect. Mortality from diarrhœa is below the mean from the beginning of October to the end of June, while it very greatly exceeds the average during July, August, and September. From Dec. 1st to May 31st, the deaths from diarrhœa in London are practically constant, averaging between fourteen and fifteen per week; three weeks after the mean temperature of the air rises above 50° F.—i.e., about June 1st—the deaths begin to get more numerous, and a fortnight after the temperature exceeds 60° F. the deaths begin to exceed the mean in London 52 per week. The greatest number of deaths occur in the first week in August, and the mortality appears to be due to some function of the temperature. Diarrhœa is most fatal in years with hot summers, especially if they be at the same time dry, and is least fatal in cold summers, especially if they be at the same time wet. The number of rainy days appears to be at least as important as the amount of rain that falls. The temperature of the water of the Thames has a closer relation to the mortality from diarrhœa than the temperature of the air. The temperature of 62° F. is more critical than that of 60° F. All attempts to express the diarrhœa mortality as a function of temperature *only* have failed. Diarrhœa is therefore probably a communicable zymotic disease, which thrives best during hot weather. From fifteen to twenty-five years of age the death-rate from diarrhœa is only ·04 per 1000 living at that age; from five to fifteen years of age it is a little greater, and from twenty-five to fifty-five only ·1 per 1000. From two to five years it is ·6 per 1000; over fifty-five years, 1·2 per 1000; during the second year of life 5·1 per 1000, and during the first year, 17 per 1000 living at that age. These figures are derived from the means of the years 1847—78. Dr. Longstaffe concludes that there is a specific poison of diarrhœa which makes its appearance in the summer months, and that bad water, fruit, artificial feeding, &c., may be excluded as causes. There only remains then bad air, either (*a*) as a locally-bred miasm, or (*b*) sewer air. He suggests that the exciting cause of summer diarrhœa is intimately connected with the process of putrefaction, however and wherever arising; but that in a large proportion of the cases the infective material has its source in the public sewers, and is introduced into the system through the lungs.

# Reviews and Notices of Books.

*Clinical Researches on the Therapeutic Action of Chloride of Ammonium in the Treatment of Hepatic Disease.* By W. STEWART, M.D. London: Smith, Elder, and Co. 1879.—This is an interesting contribution on a subject with which English practitioners are but too little acquainted—the treatment of hepatic affections taking origin in tropical climates. With increase of our colonies and the rapid means of transit, the number of invalids returning home for treatment annually increases, and the practitioner who wishes to escape occasional mortification should make himself conversant with some of the main points of the chief tropical diseases that may be thus casually brought under his notice. Chronic dysentery, abscess of the liver, and the hepatic and splenic engorgement so frequently met with in old cases of malaria, are apt to cause considerable anxiety and worry unless the medical man has paid some previous attention to this class of case. We therefore hail with satisfaction a work of this kind, which is a record of clinical observations made with regard to the action of chloride of ammonium in certain hepatic affections common to the tropics. Dr. Stewart's work is brief and to the point, and is thoroughly clinical in its character. Practitioners will find it not only an interesting work for present reading, but a useful one for their bookcases, to refer to whenever a patient suffering from tropical hepatitis, chronic or acute, may by chance come under their care.

*Student's Primer on the Urine.* By J. T. WHITTAKER, M.D. London: J. and A. Churchill. 1880.—This is a painstaking little work, but it is hardly fair to call it a "primer" on the subject, for the beginner would require considerably more information on certain points before he could make much use of it. The author details plainly enough what happens, but he does not explain the why. This we hold to be an essential point in all elementary teaching. The book is likely to prove useful to advanced students and practitioners, who may want to refer for particulars as to the application of some particular test. The illustrations of urinary deposits, casts, &c., etched by the author, are well done, and are certainly the best feature of the work.

*The Essentials of Bandaging, &c.; with a Chapter on Surgical Landmarks.* Illustrated by 134 Engravings on Wood. By BERKELEY HILL, M.B. Lond., F.R.C.S., Professor of Clinical Surgery in University College, Surgeon to University College Hospital, and Surgeon to the Lock Hospital. Fourth Edition, revised and much enlarged. London: Smith, Elder, and Co. 1880.—The only possible objection that the most captious critic can make to each succeeding edition of Mr. Hill's book is one that equally applies to nearly all books—namely, that it tends to grow obese. The last edition contains one hundred pages more than the second, and that edition was "revised and enlarged." Though we may regret that this useful guide has almost grown out of pocket-size, we cannot indicate a single page that could be safely omitted. An excellent chapter on "Surface Guides and Landmarks," revised by Mr. Rickman Godlee, occupies sixty-four of the one hundred additional pages, and is a distinct acquisition. The description of Professor Lister's mode of antiseptic dressing has been rewritten by the same well-informed pen. Dr. Sayre's method of applying the plaster-of-Paris jacket for disease of the spinal column has been introduced into this edition. In every respect Mr. Hill's little book is worthy of unreserved commendation. Until by long practice the dresser or surgical assistant has learned enough to do without it, he should make it his constant companion.

*A Manual of Minor Surgery and Bandaging for the use of House-Surgeons, Dressers, and Junior Practitioners.* By CHRISTOPHER HEATH, F.R.C.S., Surgeon to University College Hospital, &c. Sixth Edition. London: J. & A. Churchill. 1880.—It can be necessary in only exceptional cases to review any work which has reached a sixth edition, and this book, so well and favourably known to the younger members of the profession, is no exception to the rule. This edition appears to be brought well up to date, and will be found a very safe guide for those who have the care of surgical cases.

*A Handbook of Therapeutics.* By SYDNEY RINGER, M.D., Professor of the Principles and Practice of Medicine in University College, and Physician to University College Hospital. Eighth Edition. London: H. K. Lewis. 1880.—It would be hard to say whether a zealous teacher and busy practitioner, who has conscientiously edited seven editions

of a large octavo volume on a progressive subject in about as many years, is more to be congratulated or pitied. The sixth edition of Dr. Ringer's well-known handbook appeared at the end of the year 1877, the seventh in 1879; and here we have the eighth at the beginning of 1880. Under these circumstances, except to confirm the author's statement that he has "endeavoured to include the various new facts that have come to light during the twelve months that have elapsed since the issue of the last edition," we have little more to do than heartily to commend the latest edition to our readers.

*The Art of Perfumery, &c.* By G. W. SEPTIMUS PIESSE, Ph.D., F.C.S., Analytical Chemist, author of "Chemical, Natural, and Physical Magic." Fourth Edition. London: Longmans, Green, and Co. 1879.—Whether the lavish use of perfumes by the ancients on their persons and in their houses was intended to gratify an exquisite sense of smell, or to counteract the alternative predominance of evil odours, may be a debateable question. But whatever may have been its reason, the practice dates from remote antiquity. Mr. Piesse, in the introduction to his interesting and practical work, gives a brief sketch of the history of the use of perfumes. He thinks it probably began in religious observances. Frequent mention is made of fragrant gums, woods, fruits, &c., in most of the early historical records, both sacred and profane. The Egyptians, the Chinese, the Hebrews, the Greeks, and the Romans have all left behind evidence of the general use of cosmetics and perfumes. Nor can the moderns be accused of neglecting them, if we may trust Mr. Piesse's statement that the annual products of Paris alone exceed in value two millions pounds sterling. To those who desire to learn the history of perfumery, as well as to those who wish to become practically acquainted with the art of making perfumes, of obtaining odours from plants, of raising fragrant herbs, of preparing cosmetics, washes, tooth-powders, &c., we gladly recommend Mr. Piesse's book, which has acquired wide reputation, having been translated into German, French, and Italian, and been twice reprinted in America.

*Note-Book of Solubilities, arranged chiefly for the use of Prescribers and Dispensers.* By JOHN EAGLE. London: H. K. Lewis. 1880.—A handy little volume of this kind was much wanted. Prescribers often feel at a loss as to the best menstruum for dissolving some of the less familiar drugs, and will be glad to have this little work by them to refer to when in doubt and difficulty. Patients, too, will feel grateful, we are sure, if prescribers will make use of it, for it often happens that they have to swallow a very nauseous dose, from want of consideration by their physician in this matter. The contents are well arranged for reference, and the book is well printed and neatly got up.

*Analytical Chemistry: a series of Laboratory Exercises.* By W. DITTMAR, Professor of Chemistry in Anderson's College, Glasgow. London and Edinburgh: W. and R. Chambers. 1880.—A useful elementary work for beginners. The appendix is especially suited for medical students, giving a summary of some of the organic substances that come more particularly under their notice, as, for instance, the tests for the alkaloids, sugars, and some of the chief urinary constituents. Indeed, we should like to see this appendix enlarged in a future edition, and a table of the reactions of the proximate principles, and some of the important products of their decomposition, given more fully.

Mr. ARTHUR ROLAND has, in the series entitled "Farming for Pleasure and Profit," an interesting volume on "Poultry Keeping," in which he strives to show how that branch of rural enterprise may be carried out without loss, and even with profit. The little work will be welcomed by the many who indulge in the home pleasures of country life.

## NAVAL MEDICAL REFORM WARRANT.

### II.

SURGEONS.—*Half-pay of the Navy; Non-effective Pay of the Army.*—In the Navy it is compulsory, whereas in the Army it is only exceptional. If it were abolished in the Navy, then the necessity for inequalities of full-pay between the sister services would cease with it, and the same scale would serve for both. So long as that is not effected, the principle of increase by four yearly for five yearly periods should be applied to half-pay as well as to full-pay, which would entitle the naval surgeons to the following rates:—

TABLE IV.

| Ranks. | Full-pay Service. | Per Diem. | Per Annum. |
|---|---|---|---|
| | | *s. d.* | £ *s. d.* |
| Staff-surgeon ... ... | After 14 years | 13 6 | 246 7 6 |
| ,, ... ... | ,, 18 years | 20 0 | 365 0 0 |
| Fleet-surgeon ... ... | ,, 20 years | 20 0 | 365 0 0 |
| ,, ... ... | ,, 22 years | 22 6 | 410 12 6 |
| ,, ... ... | ,, 26 years | 25 0 | 456 5 0 |

Army surgeons being entitled to the same sums after fifteen, twenty, twenty-five, and thirty years respectively.

RETIRED PAY.—*Compulsory Retirement.*—This is a question of no secondary importance, since it becomes the great boon, after the turmoil and fluctuations of active-service life, when hopes of progress have ceased, and nothing remains to the grey-headed officer beyond the social position and the ease he may have secured to himself and family as the results of his labours. It is therefore only right that those of the same profession, who have devoted their best abilities and long service to the State, should receive equal pecuniary considerations at about the same ages. The great difficulty in effecting this uniformity depended in past years on the different time-value between the continuous service of the army and the non-continuous service of the navy, interrupted as it was by periods of half-pay. Thus, if we assume twenty-two years for both at entry, the army surgeon serving continuously completed twenty years' service at forty-two years of age, while his *confrère* in the navy rarely did the same under forty-five years; and twenty-five years, completed in the army at forty-seven, would bring up the naval medical officer to fifty-one or fifty-two years of age. Beyond this, the conditions on which the maximum of retired pay was obtainable are further in disfavour of the navy surgeon, by reason of later age for compulsory retirement, which still stands at sixty, while fifty-five has been that for the army surgeon. Since March, 1873, by Order in Council, the latter has been enabled to retire, on medical certificate, after twenty-five years' service, at forty-seven years of age, on £365 a year, and that sum was secured on his compulsory retirement at fifty-five years of age. By the Navy Order in Council of the 6th July, 1866, the age of sixty was fixed for the compulsory retirement of Staff Surgeon—now Fleet Surgeon—ranking with Surgeon-Major of the Army, retired compulsorily at fifty-five.

In March, 1870, a comprehensive scheme for the retirement of all naval civilian officers came into force; it was complicated in its details, and on a sliding scale; but, while affording to all alike the great benefit that half-pay time was to be counted as two-thirds of full-pay service, it was unjust to surgeons in fixing their maximum at £400 instead of £450, as in the case of other civilian officers of equal ranks. This inferiority was deeply felt by the Fleet Surgeons, so that great dissatisfaction was expressed; and four years elapsed, of momentous import in keeping down the admissions to the service, until by Admiralty Circular, dated 6th March, 1875, that disability was removed, by placing them on the same scale of retirement "as Chaplains and Naval Instructors, Secretaries and Paymasters, their maximum to be £450 instead of £400."

The new Army Warrant grants to all Surgeons-Major the retired pay of £456 5*s.* at fifty-five years of age, and thus all that is requisite to equalise the services is, that Fleet Surgeons shall have the same sum at the same age of fifty-five years, recommended for their compulsory retirement by the Admiralty Committee of 1865, on the evidence then laid before it.

*Voluntary Retirement.*—This is of a very different character from the compulsory, in being a privilege when carrying emoluments for past services with it, and therefore the authorities have on their side a right to place such checks or limits to it as may be thought expedient for the time being.

For the naval surgeons the privilege was allowed, after twenty-five years of full-pay service, on the half-pay scale, by the Order in Council of 13th May, 1859. In 1866, by Order in Council of 6th July, one-half of the full-pay on which the officer was then serving or had last served, was granted to those of twenty years' service. In 1875, by Order in Council of 4th February, these terms were improved so far as to allow 21*s.* a day, or £383 5*s.* a year after twenty-five; and 15*s.* a day, or £273 15*s.* a year, after twenty years' service, limited to ten retirements per annum, under Admiralty approval of the individuals.

In contrast with this there is now the 22nd Article of the Army Warrant of 27th November, 1879, ordaining that "a medical officer, after completing ten years' service, may be permitted to retire on the gratuity or pension laid down in Article 47, when it shall be deemed expedient by our Secretary of State." The said 47th Article ordains that after twenty years' service (forty-two years of age) the retiring pay of a surgeon-major shall be £365; after twenty-five years (forty-seven years of age), £410 12*s.* 6*d.*; and after thirty years (fifty-two years of age) £456 5*s.* The service reservation being made in Article 23rd—namely, "any officer who shall voluntarily retire before the age of fifty-five years shall be liable to be called upon to serve in a case of national emergency, in a rank not lower than that from which he shall retire, until he shall complete the age of fifty-five."

The active relative positions as to retired pay existing between the executive medical officers of the army and navy may be appreciated from the following table, No. IV. These positions are evident enough under ten and above twenty years' service, but the services of an actuary are requisite to reduce the comparative values of gratuities of the one service and the pensions of the other to similar terms. It may be observed that the system of gratuities now adopted in this case for the army resembles that of commutations given to the whole list of retired naval officers in 1870.

## TABLE V.

### ARMY.

BY PENSIONS (P), OR GRATUITIES (G).

| | Full-pay Service. | Compulsory. £ *s.* *d.* | Voluntary. £ *s.* *d.* |
|---|---|---|---|
| By Order in Council, Nov. 27th, 1879. | Under 5 years | 109 10 0 | — |
| | ,, 10 years | 146 0 0 | — |
| | Above 10 years | — | 1250 0 0 (G) |
| | ,, 15 years | — | 1800 0 0 (G) |
| | ,, 18 years | — | 2500 0 0 (G) |
| | ,, 20 years | — | 365 0 0 (P) |
| | ,, 25 years | — | 410 12 6 (P) |
| | ,, 30 years | — | 456 5 0 (P) |

### NAVY.

BY PENSIONS.

| | Full-pay Service. | Compulsory. £ *s.* *d.* | Voluntary. |
|---|---|---|---|
| By Order in Council, Feb. 22nd, 1870. | Under 5 years | 109 10 0 | |
| | ,, 8 years | 146 0 0 | |
| | Above 11 years | 182 10 0 | |
| | Under 14 years | 200 15 0 | By Order in Council, Feb. 4th, 1875. |
| | ,, 17 years | 237 5 0 | £ *s.* *d.* |
| | Above 18 years | 255 10 0 | 273 15 0 |
| | ,, 20 years | 301 7 6 | 383 5 0 |
| | ,, 25 years | — | — |
| | ,, 30 years | 450 0 0 | |

(It may be noted that, computing loss of time on half-pay, the army full-pay periods of fifteen, eighteen, twenty, twenty-five, and thirty years, are equivalents of about thirteen, sixteen, seventeen, twenty-one, and twenty-five years, respectively, of naval full-pay service.)

Beyond this scale, the newly-created army rank of Brigade Surgeon, carrying with it increased rates of retired pay—£501 17*s.* 6*d.* after twenty, and £541 10*s.* after twenty-five years' service,—will demand adjustment as towards Fleet Surgeons. Curiously enough, the first step in this direction was a concession, on recommendation of the Admiralty Committee, by Order in Council (16th Article) dated 16th July, 1866:—"As a special reward to Staff (now Fleet) Surgeons, owing to the comparatively small numbers of the inspectorial ranks ..... after twenty-five years on full-pay, to be allowed £1 a day on being compulsorily retired at sixty years of age, or by medical survey."

The new army grade with its increased retired pay is only the corollary of the principle established in the navy, and all that remains for the Admiralty to do will be to expand their own principle up to the scale of pay now laid down by the War Office for Brigade Surgeons.

Again, retired officers of the navy are sensitive on the point that their army equals have still remaining to them several appanages of the army, the analogues to which in the navy are not reserved for themselves. For instance, there are Chelsea Hospital, its schools, the military colleges, prisons, and station hospitals, that may give increased pay and a social status of some value to retired army surgeons. In relation to this point, the retired naval surgeons grieve to see Greenwich College and schools alienated from the naval medical list, and placed in the hands of a civilian, and the naval prison at Lewes similarly held; and they naturally inquire, why should not these and the reversions of all appointments to the coast-guard, and under the Contagious Diseases Acts, which are specially Admiralty appanages, be open in good faith to themselves?

ADMINISTRATIVE RANKS.—*Pay: Full, Non-effective, and Retired.*—Amid the accomplished changes there are none more striking than this feature of the new Army Warrant, which it will suffice to present in its simple form, which allows only a single rate of pay in each kind for each rank.

## TABLE VI.

ANNUAL SALARIES AND PENSIONS.

| Ranks. | Full. £ *s.* | Non-effective. £ *s.* | Retired. £ *s.* |
|---|---|---|---|
| Surgeon-General | 1003 15 | 730 0 | 730 0 |
| Dep. Surg.-Gen. | 730 0 | 638 15 | 638 15 |

It must not be forgotten that in the Navy these grades are as liable as the executive ranks to periods of compulsory half-pay. Indeed, it is not impossible to sacrifice more time in this way in the grade of Inspector-General than had been done during a previous service of twenty-six years. Having pointed out the principles, the rates of increase, and the requisite changes in the varieties of pay—full, half, and retired—of the naval medical service, we respectfully commit these questions for consideration.

## REPORTS OF MEDICAL OFFICERS OF HEALTH.

*Worcester.*—Dr. Strange gives a favourable report of the state of health of the city during the greater part of last year. The death-rate was 21·17, as compared with 24·26 in the previous year, and was the lowest observed during the six years he has held office. The infantile mortality was also diminished, forming only *one-third* of the total deaths, instead of nearly two-fifths as in previous years. From his observation, Dr. Strange lays down the dictum that, as regards Worcester, and probably also towns of similar character, it is not true that the proportion of deaths of infants under one year of age to every 1000 births is a true test of the sanitary condition of a town or neighbourhood.

*Poole.*—Mr. Lawton reports a death-rate of 20·79 per 1000 in the borough for 1879, and a birth-rate of 35·46. The mortality among infants under one year is given at 22·69 per cent., and among children between the ages of one year and five years at 19·74 per cent. With reference to this high rate of mortality, he states, on the authority of the registrar, that a very large proportion of young children are "insured."

*The Halifax Combination.*—Dr. Britton prefaces his report with some observations on the local character of medical officers of health's reports. It has been objected, he states, that the officers of *combined* districts do not report on their districts as a whole, but in detail as to their several parts, thus largely depriving their reports of interest for the public generally. Dr. Britton defends this particular practice, first, on the ground that they are not prepared for the public generally, and, next, that they are framed in strict accordance with the *orders* of the Local Government Board as to reporting. We question the second element of the defence, and do not admit the first, but we entirely agree with Dr. Britton that the essential value of the report depends on its local bearing. Some medical officers of health of combined districts do preface their reports with a general report on the state of their district, without prejudice to the local reports, and with advantage, in showing the health connexion between the several districts of the combination; and these preparatory reports, we have good reason to know, are read with as great interest in the district as outside. We have never heard these reports objected to as inconsistent with the central authority's notions at Whitehall. The public generally may claim some share of interest in these more comprehensive reports, as it is only by them that they can hope to master the sanitary doings of combined districts. Dr. Britton's report for 1879 excellently serves the purpose for which he designs it—namely, the information of the several local authorities in it with regard to their particular districts.

*Sunderland.*—Dr. Yeld's report for 1879, as medical officer of health to the Port Sanitary Authority, admirably indicates what the work of such an officer should be, and is a good example of reporting. Dr. Wallace's report, as medical officer of health for Greenock, for the five weeks ending the 3rd January, notes thirteen cases of typhus removed to hospital. The annual report of the medical officer of health for Sittingbourne, Mr. N. G. Sutton, indicates good work done there. Dr. Seaton's annual summary for Nottingham, 1879, contains several very interesting and instructive facts. Particularly he notes, in respect to scarlet fever, of sixty cases removed to the Sanitary Authority's Hospital, thirty-seven were first cases taken from households containing many susceptible children within a short time of the onset of the disease. At the same time the bedding and other infected articles were disinfected by exposure to a dry heat at a temperature of 246° F. "The excellence of the results attained by this early isolation, combined with disinfection, may be judged of from the fact that only in one instance did a second case occur, and this was under circumstances which made it extremely probable that the infection was taken from some other source." He gives also some most interesting facts as to poisoning from arsenical wall-papers in his district. The annual report (1879) of the medical officer of health of the rural sanitary district of Stoke-upon-Trent shows that effective sanitary work of much promise for the future is being done there. The annual report of the medical officer for Lincoln, Dr. Harrison, proves that the city has still much to do before it can be regarded as having even approximately secured a good sanitary state.

# Analytical Records.

### "MALTINE" PREPARATIONS.

(MALTINE MANUFACTURING CO., GT. RUSSELL-ST. BUILDINGS, LONDON.)

WE have received two of the above-named Company's preparations — namely, Maltine with Phosphates, and Maltine with Cod-liver Oil and Pancreatine. Both these preparations exhibit in an eminent degree the starch-dissolving power of diastase; in fact, a teaspoonful of the maltine is capable of converting instantaneously a surprising amount of stiff starch paste into a thin limpid liquid.

"Maltine with Phosphates" contains a considerable amount of earthy and alkaline phosphates and of phosphate of iron, and will no doubt be found serviceable in rachitic and similar affections. It has a pleasant malt taste, and is easily taken by children.

"Maltine with Cod-liver Oil and Pancreatine" is a preparation of considerable merit. It contains much cod-liver oil, the flavour of which is fairly masked by the taste of the maltine, the pancreatine being added on account of its emulsifying and digestive properties.

### SALINE ESSENCE OF PEPSINE.
### SALINE ESSENCE OF PANCREATINE.

(MESSRS. SAVORY & MOORE, 143, NEW BOND-STREET, W.)

Superficially examined, these preparations would pass muster as fair samples of ordinary ketchup; yet they contain powerful digestive ferments in large quantity and in a most active state—the essence of pepsine readily digesting nitrogenous or albuminous matters under the proper conditions; the essence of pancreatine acting powerfully both upon starch and albumen.

These are thoroughly reliable preparations. Care must, of course, be taken that they are not mixed with *hot* food, &c., as the fermentative power of both pepsine and pancreatine is readily destroyed by heat.

### PULVIS THYMOL ANTISEPTICUS FOR TOILET AND NURSERY USE.

(H. & T. KIRBY & CO., 14, NEWMAN-STREET, OXFORD-STREET.)

To judge from the large number of new preparations containing thymol, this camphor seems to be coming rapidly into favour. It certainly has a good many advantages over the majority of older antiseptics, and these advantages are very clearly brought out in Messrs. Kirby and Co.'s preparation.

This is a sort of "Violet Powder," and possesses not only absorbing, but disinfecting and aromatising properties. It has a pleasant odour, and is well got up.

### WIESBADENER THERMALWASSER.

(INGRAM & ROYLE, QUEEN VICTORIA-STREET.)

The well-known and powerful mineral water of Wiesbaden has now been introduced into England. We have submitted some of the water to partial analysis, and find the chlorides of magnesium and calcium in abundance. It is, of course, a mild aperient, and will be found valuable to many who are unable to visit the charming health resort where Nature's manufacture is carried on.

### SELLERS' COAL-TAR SOAP.

(J. SELLERS, FARRINGDON-ROAD.)

A smooth and pure soap without any of the disagreeable odour of coal-tar. It is pleasant to use, so pleasant, indeed, that no one would suspect that it contained any remedial agent. It is well adapted for use in the nursery and elsewhere.

### FLUID MEAT (PEPTONIZED MEAT).

(PREPARED BY AND UNDER THE SUPERINTENDENCE OF MR. S. DARBY FOR SAVORY AND MOORE, NEW BOND-STREET.)

This is a flesh-forming food, greatly superior in nutritive value to common beef-tea, which possesses but little plastic value. It deserves careful trial in cases of impaired digestion and great exhaustion.

### ROSBACH WATER, BOTTLED AT THE ROSBACH SPRINGS, NEAR HOMBURG.

(THE ROSBACH WATER COMPANY, LIMITED, 35, PINSBURY-CIRCUS.)

This appears to be an excellent table water. It is pleasant in taste, and very pure as regards organic matter, and it contains just enough magnesia to give it the character of a mild corrective. Mr. Wanklyn's analysis shows 12·6 grains of magnesium carbonate per gallon. No doubt it will establish itself as a favourite.

### PATENT MALTED NURSERY BISCUITS.

(HILL AND SON, BISHOPSGATE-STREET, LONDON.)

The introduction of malt into biscuits for nursery use is a great improvement. The biscuits are delicious in flavour, and very easy of digestion. They may be used either with hot water or milk. We also find that they make excellent nursery puddings.

# THE LANCET.

*LONDON: SATURDAY, MARCH 13, 1880.*

WE have nothing to say on the subject of party politics. THE LANCET is a professional journal, and our concern is with professional subjects. Taking this standpoint, and leaving our readers to follow out the lines of their own personal convictions in matters of general policy, we would take the opportunity of insisting strongly and urgently on the need of direct representation for medical science in Parliament. Unfortunately for the profession and, as we think, for the country, there are few medical men in the House of Commons, and those few too frequently cease to cherish professional obligations and interests when they mingle in the strife of party contentions, or even discharge the routine duty of legislation. This is the more to be regretted because there is scarcely a question of home, or even foreign, policy discussed in Parliament which does not either immediately or collaterally involve the interests of Medicine as a science or its professors as a body. The subject is not permitted a voice in the Upper House; it is, therefore, incumbent on those who represent it that its claims should be pressed in the Lower. There is nothing selfish in this plea, because the interests of Medicine are the interests of health, and no community can be really and permanently prosperous which is not healthy.

We do not ask electors to waive their political opinions, or even to subordinate considerations of principle to professional interests; that would be a lack of fidelity which no honest man could tolerate at a great political crisis such as that through which we are passing; but surely there must be many members of the medical profession who have both leisure and the means to take a share in the business of the country. The legal and military vocations are excessively represented in both Houses. Why does it happen that the medical has scarcely a spokesman? There are "Doctors" in the House of Commons, but not Doctors of Medicine. The medical men number only four — Dr. BRADY, Dr. LUSH, Dr. CAMERON, and Mr. MITCHELL HENRY. It may be argued that members of our profession are too busy for the assumption of legislative duties. That is not a valid excuse. There *are*, as we have hinted, many who might easily devote the leisurely years of mature life to this form of public service, and at once win honour and "do good." Until some step is taken in this direction, we fear it will be vain to hope that the voice of the profession can be heard in Parliament, or the influence which it is desirable to give to medical considerations in the counsels of the nation begin to be felt. Whenever the choice of a representative in Parliament can *honestly* fall on a medical man, we shall rejoice to see a member of the profession returned. More than this we cannot say, because, as we have strongly insisted, political considerations of *principle* must, in a crisis like the present, be paramount.

The members of our profession now in the field seeking re-election are — Dr. BRADY for Leitrim, Dr. LUSH for Salisbury, Dr. CAMERON for Glasgow, and Mr. MITCHELL HENRY for Galway. The candidates for seats who have not yet entered Parliament are — Dr. B. W. RICHARDSON for West Kent, Dr. FARQUHARSON for West Aberdeenshire, and Mr. BICKERSTETH for the Universities of Edinburgh and St. Andrews. If, as we trust may be the fact, other candidates should enter the field, the claims urged by these gentlemen for the support of their medical brethren as electors will be stronger than those of any lay candidate, although they should not, under any circumstances, be allowed to override political principle. The medical elector must be a citizen first, and as such he is bound to consider the interests of the country. After that he will be promoting the public welfare by doing all that in him lies to secure the return of a representative who can not only enforce those views of general policy which he deems to be expedient for the country, but bring the principles of public health clearly and forcibly before Parliament, not simply for the advantage of medical men, but for the advancement and good of the country.

THE dissolution of Parliament at this particular moment, in a very unexpected way, is a very great inconvenience and misfortune. Amongst other harm that it has done and will do is this—that it puts a sudden stop to the work of committees, and of course the work of the Select Committee on Medical Bills, which had begun in earnest, is no exception. We have reason to know that Sir WILLIAM JENNER would have been asked to give evidence on the 12th inst. It is no secret that Sir WILLIAM'S heart on this subject beats synchronously with that of the profession at large, and that he feels keenly the exclusion of his brethren from all representation in a body which gets its large funds and its great importance from the practitioners of the country, but which has distinguished itself by want of sympathy with them, and a determination to have nothing to do with them beyond the reception of fees. We may trust, however, that Sir WILLIAM'S evidence is only postponed, and not lost to the cause of medical reform. We have already pointed out that there is some danger of the time of the Committee being unduly absorbed in the reception of evidence on one side. Of the fourteen witnesses examined last session, no less than eight were members of the Medical Council. The Registrar of the Council was another. When the question again arises, as we confidently trust it will arise in the new Parliament by the appointment of a new Select Committee, it will be our duty, and the duty of all earnest promoters of medical reform, to urge on the Committee the taking of evidence from gentlemen whose professional and general reputation, and whose freedom from the bias given by officialism in corporations, will give them just weight. The examination of such witnesses will satisfy the Committee that the demand for representation proceeds not alone from general practitioners, but from consultants who think the profession greater than any of its little corporations.

The evidence of Professor GAIRDNER and of Professor STRUTHERS will be found in another column. The general burden of it is now familiar to our readers, but we shall take a fit opportunity of discussing it in more detail than is now possible, only remarking now that it is more and more

clear to us that the Scotch Universities owe it to themselves and to their great reputation for having served the profession of medicine in past generations, to find some way of removing from themselves all appearance of obstructing a movement for raising the *minimum* standards of examination for admission into the profession.

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So far as the medical aspects of the question are concerned, the Bill for the purchase of the Metropolitan Waterworks, and the establishment of a Trust for the supply of water to the metropolis, now before Parliament, gives no promise of immediate betterment of the supply, and little hope for the near future. The Trust would take over the works of the existing Companies as they stand, also their officers, as far as would be requisite for carrying on the works, and such works would have to be accomplished, as aforetime, in accordance with the present law relating thereto. The sources of supply, the active agents, and the works remaining the same, it is hardly likely that, whatever may be the effects produced by the substitution of a single governing body acting in the public interest for several Companies acting in their own interest, the new body, if formed, will soon be in a position to deal with the question of the purity of the water-supply, as medically considered. Indeed, Mr. Secretary CROSS, in introducing the Bill to the House of Commons, except that reciting the objects of the measure, the first-named of which is "the supply of pure and wholesome water for drinking and other domestic purposes," made no reference to the direct medico-sanitary aspects of the matter, but dealt almost wholly, as was no doubt natural at that stage of the business, with its economical aspects. He laid especial stress upon the reduction of expense which would be brought about by the unification of the governing body and by the consolidation of the administrative staffs. He urged also the advantages which would arise from the combination of the several works as one work, in securing a proper distribution of water throughout the area over which the mains extend, for general purposes and in view of a constant supply; also for public purposes, such as the watering of streets and extinguishing of fires, and for manufacturing and other general uses. In fact, as regards the *quantity* and eventually the *cost* of the water-supply, the Bill gives great promise, but as to the *quality*, it affords little hope of material improvement for some time to come.

We have nothing to do here with the financial aspects of the Bill, upon which doubtless its acceptance or rejection by the House will depend. But already somewhat extravagant notions of its medico-sanitary aspects appear to have been getting afloat—not unnaturally, perhaps, seeing how it is framed,—and these aspects require consideration. The Bill, in the recital of its objects, places first "the supply of pure and wholesome water for drinking and other domestic purposes." Then follows the summary of those purposes which relate to the quantity of the supply for public and general uses, to which reference has already been made. Giving a foremost place to "purity and wholesomeness" reads pleasantly when the inhabitants of the metropolis generally are being once more unsettled on the subject by the evidence tendered at the inquiry concerning the so-called Lower Thames system of sewerage. We are again condemned to listen to detailed accounts of the filth poured into the Thames above the intakes of the several Water-companies' works taking water thence, and by the considerable floating population of the upper parts of the stream; and we know that what is true of the Thames in this respect is true also of the Lea. Of these facts there is no doubt, and they stick to the mind, furnishing an argument against the use of the water of the streams for drinking and domestic purposes which neither the chemist nor the microscopist nor the statistician can materially modify, and which is disregarded in practice solely from sheer necessity. When, therefore, it is proposed to legislate in this year of grace for, among other things, "a supply of pure and wholesome water" for the metropolis, it behoves us to know what is really meant by the term if we would escape a fool's paradise. And, first, let it be remarked that the words are by no means new in legislation as to the metropolitan water-supply. The Act of 1852 had for its primary object "to make provision for securing the supply to the metropolis of pure and wholesome water." This alone will disabuse us of attaching any extravagant notions as to the meaning of "purity" and "wholesomeness" in the present Bill. Purity and wholesomeness, so far as the Thames was concerned, were in 1852 deemed to be secured by the removal of the intakes of all the Water Companies taking water from the river to points above Teddington Lock, and, in common with the Companies who took water from other streams, by "effectual" filtration. And the words in the Bill of 1880 appear to mean the same, and no more than in the Act of 1852. Still, we are in a somewhat better position now than at the earlier date. Since that time not a little has been done, and more is being done, to divert sewage from the Thames and the Lea above the intakes of the Water Companies, and the quantity of filth now passing into the stream is less than formerly. But much remains to be done in this direction before water from the Thames above Teddington Lock, seen through the mind's eye, will cease to provoke disgust. Then there have been considerable improvements in the method and mode of filtration adopted by the greater number of the Companies, but in this direction there is also much to be done, at least as regards the filtration of the water in certain of the Companies' works. Whether "dust"-sifting is permitted to be carried on in the neighbourhood of a Company's filter-beds, as was certainly the case in one instance not long ago, we are not prepared to say; but the fact is worth noting in passing with reference to the question of purity and wholesomeness.

We may take it that for some time to come the new Trust, if created, would, in so far as the purity and wholesomeness of the water-supply of the metropolis derived from the Thames and the Lea are concerned, be restricted in its efforts to diminishing the fouling of the streams above their intakes, securing more effectual filtration of the water, and preventing accidental pollutions by the near contiguity of offensive trades likely to taint the water, such as "dust"-sifting, in their reservoirs and filter-beds. A single public body ought to be in a position to carry out these requirements in a much more efficient manner than could be compassed, or ever expected from, private companies. To the limited extent here indicated we may, perhaps, reasonably look for an increased purity and wholesomeness of the water supplied to the metropolis from the Thames and Lea. We

may look also for some security against the repetition of such disasters as occurred in the east of London in 1866, when by a heedless temporary distribution of impure water through the mains of the principal Water Company supplying the district, a shocking outburst of cholera, the disease being present at the time, was determined. These would be no slight gains, but they would fall far short of securing such purity and wholesomeness of the water-supply from the Thames and Lea as would meet with approval in the strict medical sense. This is a matter, however, in which we are at the mercy of necessity, and in which the medical element cannot be dissociated from other and even more pressing considerations. Taking the question of the water-supply of the metropolis as it stands, the Trust proposed to be formed would certainly tend to a considerable improvement of the supply in its medico-sanitary sense, and would probably prove eventually to be an important step towards the securing of a supply, always longed for, nor unfrequently devised, but up to the present unattainable, which should in purity be free from even sentimental objections.

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THE amalgamation of the administrative departments of the Army and Indian Medical Services has, as might have been anticipated, caused a great amount of excitement among the officers of the latter service. We have received numerous letters on the subject, some of which we have inserted in our columns, and we confess that, although we do not go so far as some of the remonstrants, we think there is a strong case made out for a reconsideration of the new arrangements. Among other documents, we have received a pamphlet entitled, "Brief Notes regarding the Indian Medical Service; its history, services, present position, and future prospects, with suggestions for redressing its grievances." The pamphlet states the case of the department briefly, clearly, and so temperately as to merit consideration and careful study on the part of the authorities. It begins by pointing out the difference between the retiring pensions of the officers of the Army Medical Department under the new Warrant, and those of the Indian service; but this scarcely bears upon the question of administrative amalgamation; it may be a good reason for a revision of the Indian pension scale, but nothing more: The next subjects discussed are the various duties and employments devolving upon the Indian medical officers, including, in addition to the ordinary military service, professorships in the medical colleges and schools, the various medical posts at the Presidency and other large towns, civil surgeoncies of districts, and vaccination superintendents; to which must be added civil non-medical duties, such as inspectors-general of gaols and governors of central prisons, assay masters, the higher posts of the opium department, and a few appointments, as political agents and executive officers. These are all, doubtless, situations involving considerable responsibility, but they also carry with them adequate remuneration. It is justly claimed that the duties have, as a rule, been discharged efficiently and faithfully. The pamphlet asserts that "any system that attempts to supersede [the present organisation] by dividing the service into distinct civil and military branches must either result in a great national disaster, or, if an adequate reserve be retained for the Army proper, it will entail unnecessary and ruinous expenditure on the already overburdened finances of India." This, however, is a point on which there may probably be very considerable difference of opinion. It very briefly notices the general services rendered to the State by the medical officers from the time when the first concession of land for the establishment of a factory was granted by the Emperor of Delhi to Dr. BOUGHTON, with a subsequent confirmation and enlargement of the grant to Dr. HAMILTON, down to the present times, when the Telegraph Department, the Post-office, and the Forest and Gaol Departments have been organised and brought up to their existing efficient condition by medical officers. The special scientific services rendered by the department are next briefly adverted to, especially as regards tea, gutta-percha, and cinchona, and the valuable contributions made by Indian surgeons to the great progress of medicine and its collateral sciences. Under this head we find one of the very few statements to the perfect accuracy of which we take exception. It is said that owing to the great success achieved in the prevention and improved treatment of tropical disease, one large Assurance Company has reduced its rates for Indian risks to the same level as that for parties residing in Europe. Now, if we are correctly informed, the office which did so has ceased for some years to take lives on these terms. It is, however, in our opinion, justly claimed "that the labours of the officers of the medical service have been an unmixed blessing to the peoples of India." The war services of the department are also shortly noticed, and the niggardly manner in which rewards, honours, and decorations have been conferred on it is commented upon. Of 680 officers now serving, only one is decorated with the Companionship of the Bath, and one with the Star of India!

With such claims from past services it is natural that the medical officers should complain of the suppression of three appointments of Surgeon-General and six of Deputy Surgeon-General, and the consequent loss of chances of promotion; that they should decry the injustice of the post of principal medical officer in each of the presidencies being filled by officers of the British service; and that they should strenuously exert themselves to have this order of things reconsidered and altered. The redress claimed in this pamphlet appears to be that such Surgeons-Major as do not elect to remain in civil employ should be permitted at once to retire with the pension to which they are entitled for length of service and an extra pension of £250 per annum, to which they would in due course become entitled when they attained the rank of Deputy Surgeon-General. It is stated that if this were done, and surgeons employed in place of these surgeons-major, an annual saving of £50,000 would be effected. This, however, might not improbably present a different result if the question of the value of the annuities, present and prospective, were to pass through the hands of an actuary. The pamphlet appears to confine redress to the grievances of the senior surgeons-major, but the prospective loss of promotion of the junior officers of the department merits equal consideration. In some of the letters which have reached us the suggestion has been made that the appointments of Surgeon-General and those of the Deputy Surgeons-General should be filled up alternately from the two services. But this seems open to the objections that it would tend to keep up a jealous

and unpleasant feeling between the two departments, and that the officers of the Army Medical Department might consider that if these appointments were to be shared on such a principle, so ought those of the more lucrative posts of Presidency Surgeon, &c.

We cannot see any good reason why the two departments should not be amalgamated on the same principle as the other scientific corps, the Artillery and Engineers, have been. The experience gained in carrying out that amalgamation would, no doubt, enable the authorities to avoid some of the causes of discontent, which were then developed, and to take such measures as would at least mitigate the inconveniences, and remove the sense of injustice and want of due consideration which appears at present to be the cause of much angry feeling and dissatisfaction. If the option of retirement with compensation for the loss of prospective promotion were offered to the senior surgeons-major, we see no reason why an efficient amalgamation should not be organised. As precedent is all-important in such matters, we would point to that made by Lord CRANBROOK in his Warrant of 1876 for the British Medical Department, when the administrative officers were granted compensation on actuarial calculations for the loss they sustained by the alteration in the age for compulsory retirement.

# Annotations.

"Ne quid nimis."

## VACCINATION.

IN the House of Commons on Monday, Mr. Sclater-Booth appealed to Dr. Cameron, who had in charge a Bill on the subject of vaccination, which raised points of some complexity and difficulty, whether he thought it expedient to proceed with the measure under existing circumstances. He could assure the hon. gentleman that the question of the advantages and disadvantages attendant on the use of animal lymph, which had been long engaging the attention of the Local Government Board, were receiving fresh illustration by experiments now going on. Dr. Cameron said he thought it was pretty evident that his Bill had little chance of becoming law this session, and therefore he would not proceed with it.

## UNSEAWORTHY SAILORS.

THE question of loss of life at sea is once more engaging the attention of Parliament, and further measures for the protection of the sailor will doubtless ere long be enacted. But whilst everything is being effected to guarantee the safety of crews, it must not be forgotten that there is another side to the question, and one that in all discussions on the subject has been apparently overlooked—viz., the risk to the shipper, the passenger, and the insurer, from the shipment of "unseaworthy crews." In our columns of the 28th ult. Dr. Ralfe, the Senior Physician of the Seamen's Hospital, drew attention to this point. He says, "It is often difficult to induce sailors suffering from chronic diseases to make a sufficiently long stay in hospital so as to effect a cure. As soon as the more urgent symptoms have subsided, and they think they can pass muster before the shipping agent, they engage for another voyage. As may be expected, there is a speedy return of urgent symptoms, and the men become incapable of performing the duties for which they were engaged." It may readily be understood that under such circumstances the ship may become short-handed and may often be brought into great peril. Indeed, the worse the weather the greater probably will be the break down on the part of the weak members of the crew. What is wanted is a better system of registration and medical inspection of all crews on the vessel leaving port. It should be made incumbent on all captains, at the end of the voyage, to give each member of the crew a certificate plainly stating the condition of the man's health during the voyage, the number of days he was on the sick list, and the nature of the disease for which he was invalided, and no shipping agent should be allowed to engage a man for a fresh voyage without the production of this certificate. In addition to these measures, which shippers and insurers would, for their own interests, do well to insist on, the Board of Trade should pay more attention to the sanitary and hygienic arrangements on board vessels, especially those engaged only for trading purposes. Of late there has been a manifest increase in the cases of scurvy admitted at the hospitals of our maritime ports, while outbreaks of typhoid fever among crews from shipping bad water, is of no unfrequent occurrence. Lastly, the public should be encouraged to support those institutions which, like the Sailors' Homes, provide him with comfortable and wholesome lodging whilst on shore, thus lessening the temptation to debauchery and riot, or, like the Seamen's Hospital, which afford him a refuge when stricken with disease, and in which he may remain till the medical officers consider him sufficiently restored to health and strength to resume his occupation.

## NEPHRECTOMY.

THE subject of extirpation of the kidney was under discussion at the last meeting of the Royal Medical and Chirurgical Society. A lengthy paper describing the history of the operation, and containing an account of a case of cancer of the kidney, removed by abdominal section, was read by Mr. Arthur Barker. Although the operation in this case was in itself successful, the patient unfortunately succumbed on the third day, apparently from cardio-pulmonary thrombosis. It was admitted, however, that the cause of death was not quite manifest, and in the course of the debate Dr. Hilton Fagge expressed his mistrust of the occurrence of pulmonary thrombosis, a point upon which he was diametrically opposed by Sir Joseph Fayrer. Mr. Knowsley Thornton gave details of a case of hydronephrosis successfully removed by abdominal section, and Mr. Clement Lucas spoke of a case, now under his care, in which he had removed a pyonephrotic kidney through the loin. In the present state of the question it seems hardly possible to lay down definite rules as to the choice of the operation, whether it be better to remove the diseased organ through the loin or through the abdominal cavity. Obviously the latter method, which has certain advantages in affording more space for the operator, and in displaying to view the renal vessels and ureter, is inapplicable for cases where the kidney is much bound down by adhesions, as in cases of long-standing suppurative disease. The question raised by Mr. Holmes as to the justifiability of interference with rapidly growing malignant renal tumours, although undoubtedly one of great importance, was fairly met by Mr. Barker's reference to Professor Martin's case. In this case the growth was successfully removed without any recurrence a year after date, and it surely seems as justifiable to interfere in these cases as in cases of malignant growth in other parts of the body. If the operation be performed early enough, before the cancer is disseminated, the prognosis is as favourable as in most cases of removal of cancer, since the safety of the operation is insured by antiseptic precautions. In Mr. Barker's case the operation was performed under difficulties, the patient was much debili-

tated from the continual hæmaturia, and on the day of operation suffered much from vomiting, which must further have reduced her strength. It is quite open to question whether the operation itself did materially hasten death. In such and similar cases the surgeon has primarily in view to avert death, but also to relieve pain and suffering, and he should not be daunted by the formidable character of the operation if he is assured that he can perform this without undue risk. Abdominal surgery is extending its limits, since ovariotomy has pointed the way in showing how much can be done with safety in this important region.

## THE ARTISANS' DWELLINGS ACT.

IT is much to be regretted that so well-intentioned a measure as is the Artisans' Dwellings Act should have contained clauses which render its working simply disastrous to the pockets of the ratepayers.

The Act, as it at present stands, directs that accommodation shall be provided for the displaced families *actually upon the site* which is marked out for demolition and reconstruction. Now it is obvious that builders of artisans' dwellings can only afford to give a certain moderate sum for their ground, and accordingly, as is well known, the Metropolitan Board of Works have been obliged to sell ground which cost them over £700,000 for the comparatively paltry sum of £170,000, and have thus saddled the metropolitan ratepayers with a debt of over half a million sterling. Had the land which is to be subjected to improvement been offered for sale at its proper value for mercantile, trading or other purposes, it is possible that a profit might have been made, and that a handsome sum might have been realised towards the erection of those dwellings, the need for which is the main object of the scheme. Alterations have lately been made, or are about to be made, in the Artisans' Dwellings (Scotland) Bill, which will permit of the erection of dwellings on sites slightly different from that which is the object of the improvement scheme, and thus our shrewd neighbours will avoid that difficulty into which we have heedlessly run. Meetings of ratepayers have lately been held in various parts of London, and resolutions have been passed to the effect that Torrens' Act should be rigidly enforced before having recourse to Cross's Act. By Torrens' Act there is conferred a power of removal of nuisances, and, if necessary, of demolitions of dwellings which are proved to be a nuisance. Torrens' Act has never yet been put thoroughly in force, and even if it were the powers of reconstruction which it gives seem to be practically *nil*. What seems really to be required is the repeal of certain clauses of Mr. Cross's Act, a repeal which the new House of Commons will doubtless speedily effect.

## RECOVERY FROM OPIUM-POISONING.

THE recovery of an infant after a large dose of opium is so rare as to deserve notice. An instance lately brought before the Académie de Médecine is one of the most remarkable on record. A teaspoonful of "laudanum de Sydenham" was given to a child three weeks old, in mistake for syrup of chicory, which had been prescribed for constipation. The mistake was made at 9 A.M., and was immediately discovered and an emetic given without effect. M. Nicolas, who records the case, saw the child soon afterwards, and ordered sixty grammes of a decoction of galls, and coffee in abundance. The first symptoms presented themselves two hours later, and consisted in somnolence and evidence of nausea, accompanied by tonic convulsions, after which the child passed into a state of prostration or rather of complete inertia, which continued during the day. The convulsive attacks were brought on by every attempt to administer a liquid by the mouth, and gradually became more frequent and severe. Even the heart ceased to beat during the syncopal condition which succeeded the attacks of convulsion. As long as they continued there was neither vomiting nor action of the bowels, nor was any urine passed during the first twelve hours. During the attacks of syncope, artificial respiration was kept up. Twenty times the child was thus apparently kept from immediate death. At 7 P.M. the somnolence appeared to diminish; the child opened its eyes and looked around. The next day witnessed a marked reaction; the pulse rose to 180, and in the afternoon a little milk, with a few drops of brandy, was swallowed. The following morning the child was sufficiently recovered to take the breast, and on the fourth day was well.

## EMPLOYMENT OF STREET CHILDREN.

THERE seems to be a strong feeling in favour of legislation to limit the hours during which young children may be allowed to sell newspapers and matches in the streets. Doubtless there is need for some restrictions in this respect, but we are not prepared to accept without qualification the presumption that if the employment of the children who now sell evening papers in the streets were prohibited, "they would go to bed in proper time." The fact of their having beds to go to probably to a large extent depends on their earnings during the hours devoted to labour. However desirable it may be to order the lives of the poor on the bases of expediency, we must not overlook the fact that bread-winning is the first necessity; and those who desire to legislate for the well-being of the many must not draw their suggestions exclusively from the habits and circumstances of the few. With the majority of poor families it is a necessity of bare existence that each member should contribute to the common fund. Before we proceed to cut off every means of earning a livelihood, and to close every avenue for the collection of supplies, it will be indispensable to provide improved facilities, and to open up new ways of self-support. Attendance at a Board school is not the only object of child-life. We are compelled to fall back on the prosaic maxim that he who would live must eat, and bread is not to be won without work.

## THE DRY-EARTH SYSTEM AND ITS FOUNDER.

HARDLY has the grave closed over the honoured remains of the Rev. Henry Moule, M.A., when the system of filth-disposal, which in its present form he founded and did so much to promote—namely, the "dry-earth system,"—has again been brought prominently before the public in the columns of *The Times*. *Apropos* of certain observations of that journal on the difficulties attending the disposal of the sewage arising from the water-carriage system of filth-disposal, Dr. Thos. Hawksley urges anew the advantages which would be obtained from a more general use of the dry-earth system in towns and country places. No municipality, or commercial company acting for a municipality, has, however, as yet (unfortunately) seen its way to any general adoption of the system. That in after years its merits will be more widely acknowledged and acted upon in this country, and its founder's enthusiasm in the matter justified in the event, we feel little doubt. Mr. Moule died on the 3rd of February last, in the seventy-ninth year of his age, after having held the Vicarage of Fordington, in Dorsetshire, half a century. He was a man of indefatigable energy, and the elaboration and advocacy of "the dry-earth system" was only one of very many useful ways in which that energy found vent, without affecting his unwearied activity as a parish priest. His death has left a gap in his parish and neighbourhood which will be long before it is filled up, and the dense crowd which assembled round his grave testified to the affectionate regard in which he

had been held. It is deserving of note, with reference to Mr. Moule's sanitary labours, that a representative of the Medical Department of the Local Government Board, Dr. F. H. Blaxall, was present at the funeral.

## THE MEDICAL SOCIETY OF LONDON.

THE 107th anniversary of the above Society was held at the Langham Hotel on the 8th instant, under the presidency of Dr. Cockle. The gathering was a large one, and included the President-elect, Mr. Gant, the President of the College of Physicians and Surgeons, of the Medico-Chirurgical and Clinical Societies, and other leading members of the profession. The toast of the "Medical Corporations" was responded to by Mr. Luther Holden, who expressed an opinion that the preliminary tests for candidates might be advantageously increased in severity. Professor Tyndall replied on behalf of the Learned Societies in an eloquent speech, vindicating the right of experimentation in the pursuit of medical science. The health of the President was proposed in felicitous terms by Dr. Richardson, and the company separated at a late hour after a most successful réunion, enhanced by the vocal and instrumental efforts of Mr. Anderson Critchett, Dr. Forbes Winslow, Dr. Cooper Key, Dr. Smyth, Dr. Stirling, and Mr. Hammond.

## "SHEEP ROT."

FOR some time a great mortality has prevailed among sheep, and the destruction reported is something appalling. The malady is popularly known by a very old Saxon name, "rot," and is in reality due to the presence in the liver and hepatic canals of numbers of the Distoma hepaticum, a trematode entozoon, as well as the Distoma lanceolatum, also a member of the same order. These entozoa, from their resemblance to the fish called "flukes," have received the same name, and have a particular predilection for the biliary apparatus, whose function they more or less destroy, and thus lead to the slow death of the sheep or other animals they may infest. After wet seasons, animals which have been pastured on tainted land are certain to suffer, from their having ingested with the herbage the ova of the Distoma. Pastures are tainted by "fluke"-infested sheep, which pass the mature worms or their ova with the fæces, and these lodge on or are washed into the ground. The worms, of course, die, and the ova within them are liberated; and these, together with the free ova, appear to have not only a strong vital resistance to meteorological alternations, but also the good fortune to find a ready and acceptable intermediary host in the Limnæus minutus, a little mud-snail common everywhere, and particularly on wet land. This snail becomes possessed of a number of ova in its interior, and during damp weather it crawls from its breeding place in the ground up the stalks of grass and herbage, and is swallowed by the sheep or other herbivorous animals when they are grazing. Received at first into the stomach, the ova undergo partial development, and then find their way into the biliary canals. If their number is considerable, when they have attained their full growth they dilate and obstruct these canals, the walls of which become considerably thickened. During their development the secretion of bile becomes gradually diminished, and that fluid is viscid, like mucus, and altered in colour; at the same time the parenchyma of the liver becomes atrophied from the compression the "flukes" exercise upon it, and it may even become disorganised. Hence results icterus, disturbance in nutrition, anæmia, dropsy, and a general cachectic condition.

Sheep are not the only victims which suffer from the Distoma, for during the present mortality hares, rabbits, deer, and horses are said to have become infested, and died. The Distoma hepaticum has long been known to exist in the horse and ass, when they were allowed to pasture on unclean land during wet seasons.

Salt appears to be an excellent and well-known prophylactic agent, and even a curative one when the disease has not made much progress. This beneficial action of sodium chloride has been known almost from time immemorial, and the freedom from "rot" of sheep which have been pastured on salt marshes has been also recognised for centuries.

The flesh of sheep which have been affected with this verminous disease cannot be said to be positively dangerous as food, though it must be greatly reduced in nutritive properties, as well as in quality. The human being may receive and harbour the Distoma, a fact worthy of remembrance. The present mortality is likely to render sheep scarce and expensive in this country for some time, and still further darken the prospects of our agriculturists.

## ISLINGTON AND OUTBREAKS OF SMALL-POX.

THERE must surely be some mistake in Mr. Murphy's otherwise interesting report as to the outbreak of small-pox in St. Pancras. He describes the first cases in his parish as being infected by cousins living in Islington, where, he says, sixteen cases are known to have occurred in November. We have before us the Report of the Sanitary Condition of St. Mary, Islington, for November, and there is not the slightest allusion to the disease or its prevalence in Mr. Tidy's report, which is of a very formal and brief character. After the experience of 1876, it is to be presumed that the local sanitary authorities would treat small-pox cases with vigilance and give early public warning. But we repeat that in the report for November, in which Mr. Murphy says sixteen cases were known to be in Islington, there is not a word on the subject. In the table of deaths one death is ascribed to small-pox. We commend this subject to the attention of the Islington vestry and its medical officer.

## THE NEW MEDICAL REGISTER.

THE Medical Register for the year 1880 is now out. It is a larger volume by 137 pages than the Register of the previous year; though, strange to say, it contains fewer names by 48. The number of persons in the Medical Register for 1880 is 22,516. In 1876 there were 22,713. Neither is there additional matter in the volume to account for its greater bulk; but the whole aspect of the Register is improved; there is more margin, and more space between the names. We believe that great pains have been taken to increase the accuracy of the Register. But this must await the criticism of time; and we shall be curious to know from any aggrieved persons, if there be any such, the nature of the inaccuracies.

## ANOTHER DEATH FROM CHLOROFORM.

A DEATH from this anæsthetic took place on the 25th ult. at the South Infirmary, Cork. It appears that the deceased, a man about fifty years of age, was admitted into the infirmary on the 20th February, for a dislocation of the hip, sustained three weeks previously. Two attempts at reduction, under chloroform, had been made before admission without avail. Having been placed on the operating table, the heart and pulse were carefully examined, chloroform was administered, and in about five minutes, without any struggling, he appeared to be ready for operation; but before the limb was touched alarming symptoms presented themselves, the countenance changing suddenly, while the pulse ceased. Electricity was at once applied, the lower limbs elevated, and every means of resuscitation employed, including artificial respiration, for nearly an hour, but without success. The quantity of chloroform used was

about two drachms, and the quality of the drug was above suspicion. No post mortem was made, the coroner, on being communicated with, not considering it necessary. Every precaution seems to have been taken in this lamentable case; and it is remarkable in this, as in other instances, how small a quantity of chloroform may prove fatal.

## SLAUGHTER IN THE STREETS OF LONDON.

DURING the fifty-three weeks of 1879 there were, according to the Weekly Returns of the Registrar-General, no less than 236 men, women, or children killed by injuries received by horses or vehicles in the streets of London. The average number of such fatal street accidents in the eleven preceding years was 215; they rose from 192 in 1869 to 237 in 1878. These fatal accidents are increasing at a greater rate than the population. Vans, waggons, and drays are the greatest offenders, and killed in 1879 no less than 74 persons, carts being debited with 57 deaths. Cabs caused 36 deaths, tramcars 18, omnibuses 17, and carriages (presumably private) 13. The large proportional excess of fatal accidents caused by tramcars when compared with omnibuses is worthy of note; the deaths caused by these vehicles, which had averaged 11 in the six years 1873-8, increased to 18 last year. When we consider that 2387 persons have been killed in the streets of London since the beginning of 1869, when these accidents were first specially reported in the Weekly Returns, it is impossible to repress a doubt whether all that is possible is done to protect the pedestrian from the dangers due mainly to the reckless assumption on the part of drivers that the roadways are their own, and that foot-passengers venture thereon only at their own risk. If further facts are required to prove the dangers of the streets, we may add that, in addition to the fatal accidents reported by the Registrar-General, 3399 persons were, within the knowledge of the metropolitan and city police, more or less severely injured in the streets of the metropolis during last year by horses or vehicles. It is impossible to say how far this number understates the true total of persons knocked down and shaken and bruised, if not more seriously injured, in the streets of London during 1879.

## SANITARY PROGRESS IN ENGLAND.

LAST year was the ninth of the current decade 1871–80, and the Registrar-General in his Quarterly Return for the last three months of 1879 gives some valuable statistics which afford most satisfactory evidence of improving sanitary condition in England. It has always been a favourite argument of the opponents of sanitary expenditure that, in spite of the extent of such expenditure during the past thirty years, the English death-rate has remained stationary. It is impossible to deny that the rate of mortality in England and Wales was comparatively stationary during the thirty years 1841–70, as the annual rate averaged 22·4, 22·2, and 22·4 per 1000 respectively during the three decades of that period. When, however, the rapid increase of aggregation to town centres which took place during that period is taken into account, even a stationary death-rate may be accepted as evidence of sanitary progress. It may be admitted, however, that the sanitary expenditure of those thirty years, much of which was misdirected, did no more than counteract the evil effect of the rapid growth of urban population, especially in the mining and manufacturing districts of England and Wales. The Public Health Act of 1872, however, has proved a new starting-point for sanitary progress, and the Registrar-General shows that during the nine years of the current decade 1871–79, although the aggregation to towns has been all but fully maintained, the death-rate has shown an actual decline. Whereas during the preceding thirty years the annual death-rate had averaged 22·3 per 1000, it declined to 21·6 during the nine years ending December last. This fractional decline in the death-rate means more than the figures at first sight appear to signify. The Registrar tells us that it "implies that, during the past nine years, more than 150,000 persons have survived in England and Wales, whose deaths would have been recorded had the average annual rate of mortality in the previous thirty years been maintained." This decline of mortality also means that in equal numbers living only 97 persons have died during the past nine years to each hundred in the preceding thirty years. Looked at from a different point of view, this decline, if maintained throughout the lifetime of a generation, signifies that the mean duration of life has been increased by about a year and a half. The statistics of the past nine years afford abundant facts which corroborate the evidence of improved sanitary condition afforded by the general or crude death-rate. Infant mortality, measured by the proportion of deaths under one year to births, has not exceeded 148 per 1000 in the past nine years, against 152 in the ten years 1841–50, and 154 in each of the two following decades, 1851–60 and 1861–70. Zymotic fatality has shown a similar decline, and more especially the rate of mortality from fever, principally enteric. The annual death-rate from fever averaged 1·11 per 1000 in 1865, since which it has declined with but slight fluctuations, and in 1879 it did not exceed 0·30 per 1000. The annual death-rate from this cause, which was equal to 0·91 and 0·88 per 1000 in the two decades 1851–60 and 1861–70, fell to 0·51 in the nine years ending December last. It is impossible to doubt that real sanitary progress has been made during the past nine years. This progress, however, has been very unequally distributed. It has been most marked in our largest towns, and smallest in the more recent urban aggregations in the mining and manufacturing districts. Earnest and well-directed sanitary effort has yielded good results, and if the pretence of sanitation which alone exists in so many of our smaller urban sanitary districts could be galvanised into life by an efficient central health authority, health-progress in England would soon assume still larger and more satisfactory proportions.

## MEDICO-SANITARY NOTES FROM RUSSIA.

THE ravages of diphtheria still occupy very largely the attention of the journals. The disease is noted especially in the governments of Kharkow, Saratow, Voronege, Tambow, and Poltava. The latter government is looked upon as the real nursery of the malady. The epidemic broke out in Poltava first in 1876, and showed itself in that year in seven districts, 5910 cases being reported, of which 1837 proved fatal. In 1877 nine fresh districts were attacked, and the cases increased to 9858; the deaths 4445. The next year, 1878, the number of districts invaded amounted to thirteen, the cases to 14,018, and the deaths to 5774. In 1879 fifteen districts were attacked, the cases numbering 15,762, and the deaths 5703. At the end of this year, indeed, the disease had spread over the whole of the government, and extended into neighbouring districts of Kharkow.

Famine appears to be increasing in the Caucasus, extending from the Black Sea to the Caspian, and in the districts bordering Asia Minor. The severe cold of the winter has added to the misery of the suffering populations, and heavy snows among the mountains have impeded operations for relief. The dearth also in Poland, along the line of the Vistula, is giving rise to much uneasiness.

In a paper read before the Medical Society of St. Petersburg, Dr. Prissetkow said that few cases of typhus appeared among the Turkish prisoners at Plevna. The disease broke out and began to extend largely on the march towards Russia. The President of the Red Cross Society in 1877–78, M. Richter, states that the Society had but 3150 beds, distributed in five hospitals, at the most active period of the war.

The military hospitals, he says, were simply ambulances, and quite unequal to the increasing wants of the army at the time. The evacuation of the wounded became a matter of necessity, and had to be pushed forward with feverish energy. It was not uncommon to see the sick and wounded die on the journey. The failure of hospital accommodation compelled the slightly wounded to seek succour in the interior of the Empire. He notes also the great deficiency and imperfection of the carriages for the wounded, the loss to the service from there being no sufficient means to deal with the slightly wounded near the seat of war, and so enable them to return early to the ranks, and the mischief arising from the crowding of the serious cases of sickness and of wounds in parts of Bulgaria.

## RELENTING, BUT STILL CRUEL.

THE weather is less severe than it was, but it is not on that account to be trusted. Those who leave off winter clothing will do so at the serious peril of "colds." Probably in the whole circle of the seasons there is not a more treacherous time than the present. The temperature is, for the most part, genial, and the sun condescends to shine; but the winds are cold and the afternoons chilly, even more so than the evenings. It will be more prudent, for some weeks to come probably, to bear the weight and inconvenience of what is called "warm attire," than to risk the danger of unaccustomed exposure. Habitual exposure, the result of training during the vigorous periods of life, will be *natural*, and therefore innocuous; but exposure such as is dared with exhausted strength and a depressed tone of the system, after a long and dreary winter, can neither be excused nor explained except on the principle that impatience under the ills we have often tempts the short-sighted and unwary to face greater dangers—unsuspected because unappreciated.

## LOCAL GOVERNMENT AREAS.

A BILL has been brought into the House of Commons by Lord Edmond Fitzmaurice for the appointment of a Commission for the alteration of the areas of Local Government in certain cases, and for the rearrangement of the boundaries thereof. The objects sought to be effected by the commission are, so to arrange areas that no poor-law parish or union shall extend over the boundary of any county; no poor-law parish to be divided into isolated parts; no poor-law parish to be of so small a size, or have any parts so situate, as to render the administration of the relief of the poor in, or the local government of, such parish, or part or parts thereof, inconvenient; every highway parish to be coincident in area with some poor-law parish; and every highway district to be coincident in area with some rural sanitary district.

## ST. MARY, NEWINGTON.

THE twenty-third annual report of the proceedings of the vestry of the parish of St. Mary, Newington, just issued, contains the report of the medical officer of health, Dr. Iliff, for the year 1878. This report, interesting in itself as showing the details of sanitary work, admirably conducted, in a great metropolitan district, has attached to it, as a sort of appendix, an essay on small-pox and vaccination. Written with great thoughtfulness, and in most temperate language, it deals with the great issues which have recently been so much before the public and the profession, and seeks to place these issues in a readily comprehensible fashion before the vestry to which the report is addressed, and before the parishioners generally. The report is as happily written as timed, and we trust that the vestry will see the importance of detaching it from the more general sanitary subjects with which it appears, and publishing it in a separate form for the information of the public generally.

## THE NATIONAL BOARD OF HEALTH, U.S.A.

A BILL "to increase the efficiency of the United States National Board of Health" has been introduced into the Senate and House of Representatives, and is to the following effect:—It provides that upon the official publication by the President of a report by the National Board of Health, or in the intervals of its sessions, its Executive Committee, showing that any place in the United States is dangerously infected with contagious or infectious disease, the transportation of goods or persons from such a place into a State other than that within which such place is shall be unlawful, the persons guilty thereof liable to prosecution, and the goods transported to seizure and destruction. This prohibition to continue until the President shall have declared the place no longer dangerously infected. The Bill further provides that the commanding officers of all merchant vessels entering any port of the United States from any foreign port or ports situated betwixt the parallels of 30° south latitude and 40° north latitude, or upon the Mediterranean Sea, shall produce and deliver to the Customs officers of the port of entry a bill or bills of health, signed by the consul, vice-consul, or other consular officer of the United States. The Bill also provides for the appointment of a medical officer, under certain circumstances, and the delegation of exceptional powers to an executive committee.

## CORTICAL LESIONS OF THE BRAIN.

M. FRIPIER, in a memoir published in 1877, showed that the paralysis which follows the removal of the sigmoid gyrus in the dog endures as long as the animal lives. No dog experimented on recovered the normal condition. He now states (Académie des Sciences) that the same lesions caused a persistent diminution of general sensibility. The special senses are probably affected only after the convulsive crises, and when the lesion was very extensive. Among the physiologists who have studied the disturbances consecutive to the lesions of the cortex, some deny that sensory troubles result, admitting only loss of motility. Others, finding diminution of sensibility, have gone so far as to attribute the motor weakness to the loss of tactile sensibility (Schiff), or to the loss of the muscular sense, or to a psychical paralysis. Fripier concludes from his experiments (1) that the permanent trouble of movement must be attributed to a persistent paralysis; (2) that the loss of sensibility, as incontestable as that of motility, occurs, but plays no part in the disorder of movement; (3) that the functional troubles occasioned by the diminution of sensibility are identical in animals and in man, that they consist solely in the loss of the sense of touch and of the notion of the position of parts, in a more or less marked degree, and that they never produce ataxy of movements.

## THE HEALTH OF TOTTENHAM.

THE Tottenham Sanitary Association has issued its sixth annual report, and in it gives a most satisfactory account of the improved and improving health-condition of the village. When the Association was formed the sewers of Tottenham were unventilated, the water-supply (at bottom excellent) was supplemented and mingled with water from very dubious sources, and its streams and water courses were very foul. These things are rapidly becoming matters of the past, and more efficient detailed sanitary administration has been established throughout the village. As the sanitary condition of the place has improved there has been a marked decline in the mortality from the principal zymotic diseases, and there seems reasonable ground for the belief that when the next census comes to be taken, and the population, considerably increased in recent years, is accurately known, Tottenham, as it should do, will hold an excellent position as

to its mortality statistics among suburban places. The Local Board appears to be doing its work fairly well, and certainly none the worse that the Association appears to be largely influencing the elections. The report has a graceful allusion to the loss sustained by the country at large by the retirement of Dr. Farr from the post of Superintendent of Vital Statistics in the General Register Office.

## THE SELECT COMMITTEE.

AT its meeting on Monday the Select Committee proceeded to meet on the 12th inst., when it was hoped that Sir William Jenner would be able to give evidence. No idea, of course, was entertained of the clap of thunder that was to be heard an hour or two later in the shape of an unexpected intimation of dissolution. This "policy of decomposition" will not be permanently injurious. The Committee will do no more work at present, and it will meet, if it meets at all, only to break up.

## THE PROPOSED ARCTIC EXPEDITION.

WE have received a communication from Commander Cheyne, in which he protests against the assumption that he undervalues the great importance of using lime-juice in Arctic expeditions. We gather that the Commander would not have omitted lime-juice from the necessaries carried in the boats on the last expedition if he had been in charge.

## GRANULAR KIDNEY.

BY invitation of the Pathological Society, Dr. Saundby of Birmingham will, at the next meeting on the 16th inst., exhibit a series of microscopical preparations and drawings to illustrate the histology of granular kidney.

THE following members of the medical profession were presented to Her Majesty at the Levée held at Buckingham Palace on Wednesday:—Dr. Samuel Wilks, on appointment as Physician-in-Ordinary to their Royal Highnesses the Duke and Duchess of Connaught, by his Royal Highness the Duke of Connaught; Dr. John Watt Reid, on appointment as Director-General of the Medical Department of the Navy, by the Secretary of State; Brigade-Surgeon Kidd, on promotion, by the Adjutant-General; Dr. Wykeham Hawthorn Lydall, Surgeon Central London Rangers, by Major Mark B. F. Miller; Surgeon Saville, North Somerset Yeomanry Cavalry, by Lieutenant-Colonel the Earl of Cork and Orrery.

THE Associazione Protettorice degli Animali in Genoa had prevailed upon the Syndic General Parodi to prohibit the transfer of unclaimed dogs to the "university shambles," as they called the experimental laboratory, and so compel the abandonment of all physiological demonstrations whatever. But the municipal assessor has just succeeded in submitting the prohibition to a committee, which now decides that "physiology cannot be taught without experiments on living animals, and that the regulation prohibiting the transfer of unclaimed dogs to the experimental laboratory must be rescinded." So the professor of physiology resumes his demonstrations, and Genoa her place as a preparatory school of medical practice.

IN reference to the reported outbreak of diphtheria in the Ludlow Union Workhouse Schools, we are informed that the disease first manifested itself on the 17th ult., and continued to spread till the 28th, since which date no fresh case has occurred. The number of inmates of the workhouse is 180, but the disease has been confined to the children, of whom 31 out of 47 have been attacked. There have been 2 fatal cases, in each of which laryngitis supervened. In 1 there was a considerable scarlatinal eruption on the arms and chest. Amongst the conjectures as to the origin of the outbreak, is that the disease was communicated by letters received from Macclesfield, where the malady had been prevailing. Each case as it occurred was immediately removed into a separate building, and sulphur fumigations were adopted, as well as every available medical treatment, together with a special dietary.

THE committee appointed by the Admiralty to consider the rank, pay, and position of the medical officers of the navy, will consist of the following gentlemen:—Admiral A. H. Hoskins (President); the Director-General of the Navy Medical Department; the Deputy Accountant-General; Fleet-Surgeon Fegan, C.B., M.D.; Staff-Surgeon Woods, M.D.; Surgeon Tyndall; a representative of the Treasury, and Mr. Garnell, who will act as secretary.

SURGEON-MAJOR H. W. BELLEW, C.S.I., Bengal Medical Service, who has been employed on special political duty in Cabul since the renewal of hostilities subsequent to the Cavagnari massacre, has been recalled to India by the Government, and his services placed at the disposal of the Punjab Government. Dr. Bellew was for many years Civil Surgeon of Peshawur, and lately acted as Sanitary Commissioner of the Punjab.

THE successful candidate for the Radcliffe Travelling Fellowship is Mr. Wm. Wansbro' Jones, B.A. Oxon., B.Sc. London Univ., student of St. Thomas's Hospital. Mr. Jones was educated at Clifton College, graduated with first-class honours at Oxford, and has obtained two medical scholarships at St. Thomas's Hospital. The decision of the examiners has to be formally ratified by the electors.

BRIGADE-SURGEON JAMES HANNAN has been appointed to officiate as Deputy Surgeon-General of the Allahabad Division, *vice* Deputy Surgeon-General J. A. Hanbury, M.B., transferred to the Reserve Division Afghan Field Force at Peshawur.

THE Government of India have adopted the combined invalid-table and reading-desk invented by Surgeon-Major J. B. Hamilton, Army Medical Department, for use in the hospitals in India. A description of this useful invention has already been given in our columns.

IN consequence of the fourth Friday in the month being Good Friday, the next meeting of the Clinical Society is fixed for the 19th inst. Papers announced for this evening (March 12th) and not read will take precedence on March 19th.

THE training-ships at Devonport are reported to have been visited by a serious outbreak of measles. Twenty-three cases were removed in one day from the *Impregnable*, and many less severe cases remained on board.

AT the Newcastle-on-Tyne Infirmary, on March 9th, Dr. Heath successfully tied the right common carotid and the right subclavian arteries of a patient suffering from an aneurism of the innominate artery.

SURGEON-GENERAL WILLIAM GODFREY WATT, Principal Medical Officer at Malta, is about to retire on half-pay after long and distinguished service.

DR. JOHN THOMAS BANKS has been appointed Physician to the Queen in Ireland, in the room of the late Sir Dominic Corrigan, Bart.

THE Executive Committee of the General Medical Council is summoned for Thursday, the 18th inst.

DISCREPANCY IN PRINT

THE Indian papers last mail report an outbreak of cholera of a severe type at Igatpuri, a station on the G. I. P. Railway. Twenty Europeans are stated to have succumbed to the disease in one day.

The *Gazette* announces the appointment, by the Queen, of Dr. William Kirkwood, Mr. Robert Butler, and Dr. W. Malcolm Grey Maclure, as members of the Legislative Council of the Bahama Islands.

Fleet-surgeons John Cotton, M.D., and James Nicholas Dick, have been promoted to the rank of Deputy Inspectors-General of Hospitals and Fleets.

THE Local Government Board will be represented in the House of Lords by the Earl of Onslow.

# MEDICAL REFORM.

## THE COMMITTEE ON THE MEDICAL ACTS.

THIS Committee reassembled on Monday last at the House of Commons. The new Chairman, Lord George Hamilton, not being present, the chair was taken by the Right Hon. W. E. Forster.

Professor STRUTHERS of Aberdeen was the first witness examined. He said, in answer to the Chairman, that he was Professor of Anatomy in the University of Aberdeen, and Fellow of the Royal College of Surgeons, Edinburgh, and had been teacher of anatomy in Edinburgh and Aberdeen upwards of thirty years. He had also been a Visitor of Examinations for the Medical Council, and in these various capacities he had been deeply engaged in matters concerning medical legislation.

The CHAIRMAN asked the witness his opinion as to the proposal for a conjoint examination.

Professor STRUTHERS replied that he thought the evils of the present system were two in number: first, the want of security to the public arising from half qualifications; and, secondly, the inconvenience to the student of having to go to three corporations for a complete qualification. They did not, however, apply to universities at all. The Scotch universities conferred a complete qualification, and the student was not put to the inconvenience of having to go to several bodies. The existing evils could be remedied by requiring a complete qualification before registration, and by a joint examination by the corporations of each division of the kingdom without interfering with the universities at all. At present there were 376 medical students in the University of Aberdeen. The course of study was longer than that proposed by the English joint scheme, and longer than that of the corporations. The course required by the universities was four years, including four winter sessions. The corporations had only three winters and two summers, and the student might spend one year as an apprentice. The length of the winter session at the university was five months, and of the summer session three months. The examination was a more searching and thorough one than that of the corporations. The professors of anatomy and physiology devoted themselves entirely to teaching, and hence there was a more thorough education given in the fundamental sciences than was given in London, where the professorships were regarded as mere stepping-stones to practice. As an illustration he might mention that Sir James Paget had thrown up his professorship, while Mr. Syme taught to the last, and other distinguished men were teaching still. It was impossible to remedy the weak point of the London and English Schools through the Medical Council. The only effectual remedy would be to pass an Act of Parliament changing them into new institutions, like the Scotch universities. There were outside examiners in connexion with the Scotch universities who sat with the professors at the examinations. The standard of education could not be lowered, because under the Act of 1858 the commissioners would have to apply to the Privy Council for permission to make any change, and the other universities had the power of remonstrance and protest. He did not consider the conjoint board system called for as far as the universities were concerned, because they had means of giving a complete medical education. He was not prepared to admit that there were advantages to be obtained by the general profession from the one portal system. It was not true, as had been stated, that in Scotland there were more students graduated than registered; the reverse was actually the case. He desired to repel all the allegations that had been made in reference to the examinations in Scotland generally, and in Aberdeen in particular. No examinations could be more careful and searching than those in the Aberdeen University, and the result was that its students were often to be found at the head of the list in the Indian competition.

The CHAIRMAN asked what was the disadvantage of a student who had passed a thoroughly searching examination submitting himself to a less searching one?

Professor STRUTHERS said that it was interfering with a system which was working well. He believed that the Scotch corporations had a very good minimum standard. The effect of the conjoint board system, proposed by the Bill, would be to lower medical education in Scotland. There had been a general misunderstanding of their position in Scotland, the idea being that they were thoroughly opposed to conjoint boards. Everything depended upon what kind of conjoint board was proposed. If they had a board that ignored the higher education of the universities the result would be that the teachers of schools would commence as conjoint board teachers, and a system of grinding, which was now extinct in Scotland, would be established. In London, the great place for grinders, the standard of education was low, the students not caring for the higher qualifications. There ought to be a definite recognition in the Bill of the rights of the universities in some such words as had been referred to by Mr. Simon. If a conjoint system were established, students who had passed the scientific examinations of the university should be admitted to the conjoint board on the payment of a fee not exceeding five guineas. They had no objection in Scotland to receive inspectors at their examinations, so long as the students were not required to pay for them. It was a remarkable fact that, according to the English scheme, the universities supplied no examiners, showing the very slender connexion between the English universities and medical education. He approved of the suggestion of the Duke of Buccleuch that conjoint board examiners should sit alongside the university examiners. Like Professor Turner, he was in favour of the adoption either of the Duke of Buccleuch's amendment or of the other suggestion that the theoretical scientific examination should be conducted by the universities and the practical examination by the medical boards—either of which would, to a great extent, remove his objection to the conjoint scheme. He was not to be understood as supporting the scheme of a conjoint board; but if any national advantage was to arise from it, the universities would not stand in the way, provided their scientific examinations were exempted, so that the students might not be unnecessarily harassed. He thought if the London corporations would do as the College of Physicians and the College of Surgeons of Edinburgh had done in arranging a conjoint examination, that would be all that was necessary. It was a very selfish proceeding to endeavour to thrust the English system upon Scotland. The cry for it had been got up by the London corporations, and it had not been put to the practitioners of England at all. The conjoint system had been tried in Germany, and had not succeeded. There were now twenty examinations in that country. The State examination, which was virtually an examination at each university, was remarkably like the Scotch system, though perhaps not so thorough. The central government each year nominated the examining body, appointing the professors and a certain number of practitioners to sit with them. There were no examining bodies in the universities. He objected to the clause in the Bill rendering affiliation to a corporation compulsory. If it were left open it would be sought as an honour; but if it was compulsory it would not be regarded as conferring any distinction, and it would be resisted, and, indeed, become an object of ridicule. The clause was a sham, because if the corporations were to have a right to compel men to affiliate, they ought also to accept the women; and he knew that the College of Surgeons would rather close its doors than do that. It was an extraordinary enactment that the corporations were not to demand fees for

affiliation. He thought it an iniquitous regulation that a student who was required to have only one diploma should have to pay for the support of three corporations. He saw no necessity for a uniformity of fees in different parts of the country. According to the English scheme, the student had to pay thirty guineas for his examination, and that was to maintain three corporations, five guineas going to the museum of the College of Surgeons. The museum was no doubt a noble and an unequalled one, but he saw no reason for making a poor Scotchman or Irishman pay towards its support. The power given to the Medical Council to alter the third schedule was a very important one, and the sanction of the Privy Council ought to be obtained in order to alter it. He could not say there was a very strong feeling in Scotland in regard to the constitution of the Medical Council, but he himself thought that the Scotch universities were not sufficiently represented, while the corporations had an unfair proportion of representation. The day had come when Apothecaries' Companies should cease to be licensing bodies at all. He was formerly of opinion that the representation of the general practitioners was advisable, but at present he did not think it was likely to do very much good. The Medical Council was at present quite large enough. If there was to be a conjoint board system, the Medical Council should, in his opinion, be elected by the branch councils of the three kingdoms. This plan would save a little the *amour propre* of some of the existing bodies. If the principle of direct representation was a right one to apply to the General Council, it was also a right one to apply to the branch councils. His opinion had partly changed on the subject, but if there was any direct representation, he thought the body of the profession had a right to claim that one-half of the Council should be elected by them.

*By* MR. ARTHUR MILLS.

So far as Scotland was concerned, he thought the proposals of the Bill would rather tend to lower medical education. That was one of the objections to the Bill. He was formerly in favour of direct representation on the Medical Council; but when he saw a man like Sir James Paget coming forward in the face of a petition from 10,000 practitioners, and saying that he thought it was not a good system, he was greatly impressed with such an opinion. It was difficult to say that because the funds of the Medical Council were provided by the general practitioners that that was an argument in favour of direct representation. He should not like to see the medical profession placed under the heel of a bureau. The branch councils might be enlarged a little, at least in Scotland, and then they would elect a General Council, perhaps a little smaller. He should not like to see a small Council, because it would be dangerous. There was a good deal of agitation in the journals as to giving the profession representatives; but if practitioners had to pay a fee of 2*s.* 6*d.* to register their vote he did not think that one in a hundred would do so.

*By* Sir TREVOR LAWRENCE.

There was not a better joint examination anywhere than in Edinburgh. He was opposed to the conjoint scheme as proposed by the English Board, and he had only suggested amendments under protest. The medical profession in Scotland did not desire reform. He knew of no profession so well educated as the Scotch general practitioners, and any disparaging remarks that had been made by witnesses would refer to the state of affairs twenty years ago. Since 1850 the Scotch universities had taken high rank.

Sir TREVOR LAWRENCE.—In the place of the conjoint scheme would you prefer that the Medical Council should have power to take away their privilege from bodies that did not conduct efficient examinations?

Professor STRUTHERS said that the Scotch universities would have no objection to any powers. The Medical Council had only a power as to the minimum; they had no power over the higher qualifications, and the Scotch universities were so far above the minimum that it really did not concern them. He would object to the Medical Council having power over the higher qualifications, because then the English universities and all the corporations would combine against the Scotch universities. He was not against direct representation.

*By* Dr. CAMERON.

His university gave no medical degrees unless the candidate had passed all examinations for the surgical degree. The Universities Commission recommended that it should be a double degree of graduate of medicine and surgery, and there could be no objection to that. In St. Andrews University there had only been one or two candidates within the last twenty years. There was no medical school; but St. Andrews was allowed by the Commission of 1858 to give ten degrees in a year to practitioners of fourteen years' standing. This was to be after examination. The cost of the Scotch qualification was about £20. It would be an advantage to the public that no unnecessary expense or monetary impediment should be put in the way of good men getting degrees.

*By* Dr. LYON PLAYFAIR.

I do not think that the fact of the fee being twenty guineas in Edinburgh as against thirty guineas in London would tempt men to go to Scotland to take their degrees, especially when the cost of travelling is taken into consideration.

Professor GAIRDNER, of the Medical School at the University of Glasgow, was next examined. He said that the number of medical students who had matriculated at the Glasgow University had continually increased from 1861 to the present time. In 1861 the number was 283, at present 560; and the increase was common to all Scotch teaching universities. It had been accompanied in Glasgow by a considerable increase in the means of teaching, both practical and scientific. That increase was not caused by any diminution in the stringency of examination. From 1874 to 1879 there were 845 candidates for the first professional examination; 456 passed, and 389 (44·7 per cent.) were remitted. In the second professional examination the number of candidates was 568; 375 passed, and 193 (34 per cent.) were remitted. In the third professional examination there were 414 candidates; 334 passed, and 80 (19·3 per cent.) were remitted. He had been alarmed at the proportion of rejections at the first examination, and it was only by looking carefully into the matter that he had been led to acquiesce in its justice. The outside examiners hardly ever complained of the laxity, but almost always of the stringency of the examinations. There were now four examinations, and at every stage the students would be tested, and sent back if they were not efficient.

The CHAIRMAN inquired if it was possible that a student who had been plucked by another examining board should go to Glasgow with much chance of success.

Professor GAIRDNER said it was utterly impossible, because the student would have three or four examinations to pass. He was surprised that Dr. Acland had shown so much ignorance on that point, because he ought, as President of the Medical Council, to have been able to contradict it absolutely, since the regulations at Glasgow as much precluded such an occurrence as those at Oxford. The clinical examinations at Glasgow had been inspected by the Medical Council and favourably reported upon. Each professor at the university was a specialist in his own subject, and with each professor there was a non-professional examiner, who exercised a perfectly independent judgment. The witness repudiated the notion of the existence of anything like a "Dutch auction," and expressed his opinion that a conjoint board would greatly deteriorate the efficiency of not only the Glasgow universities, but all the universities in Scotland. It would tend to lower the prestige of the degrees by taking away from them their old Parliamentary privilege of conveying a licence to practise. At present the students were distracted during their whole course with the idea that they would have to pass elsewhere another examination conducted by a different set of men, and probably upon totally different principles. If on national grounds it was considered desirable to have a conjoint board, the conjoint board examiners ought to go to Glasgow and act in concert with the examiners there, which he considered would be a better arrangement than the suggested division of the scientific and the practical examinations. The latter plan trusted the universities up to the last point, and distrusted them just where it was most important that the students should have confidence in their teachers. He should object to anything which would lead students to forego a university education. The English system induced the student to give the go-by to the fundamental sciences, which in Scotland were considered very important. A student destined for practice in England would probably be expected to join one of the English colleges; in order to do that he would have to pass the English conjoint board and then would arise the question, "Why send him to

Scotland and make him pass through an expensive university examination?" The result would be that such a student would not be sent to any Scotch university. A student would not be affiliated in either of the three divisions in the kingdom unless he had passed the conjoint board of that division. If it were proposed to alter that arrangement, as laid down in the Bill, he believed all English corporations would oppose it, since they did not want to receive men who had not passed the conjoint board in England. His (Dr. Gairdner's) objection would be very much diminished if, after passing the conjoint board in Scotland, the student could join any of the corporations in Scotland or England. He had no very strong view on the subject of direct representation. There was a good deal of reason in the demand, and if the machinery were not very cumbrous he should not object to it, but he shrank from the idea of periodical agitations and canvassing. He did not think there were any particular evils arising from the profession not being represented. The proper work of the Council was medical education and registration, and if it confined itself to that it was quite large enough—if anything, too large. It might be an advantage if the Council could be made smaller, while preserving its representative character. The representation of the Scotch universities was monstrously inadequate as compared with that of the English universities, which were much less interested in medical education. If the Scotch universities were to be represented in solidarity, he thought the better plan would be to give them as many members as might be considered right, and let all the four universities concur in the appointment. There was a unanimous feeling in Scotland against the admission to the register of persons possessing a single qualification. For thirty years there had been no instance in Scotland of men being sent out without a complete examination in all the departments.

The CHAIRMAN inquired if there was any conflict of interests between the corporations and the universities in Scotland?

Professor GAIRDNER said they had no doubt their several interests, but he did not think they were in reality opposed. If well conducted they would strengthen each other. Notwithstanding various disputes between the two bodies, he believed that the pre-eminence of the Edinburgh University was greatly due to the influence of the College of Surgeons, and *vice versâ*. Students in the College of Surgeons were required to pass examinations in medicine and surgery. There was no civilised country except England where it had been habitual for a man to practise with a licence in surgery without being examined in materia medica and midwifery. Mr. Simon himself had never been examined in those subjects.

*By* Lord GEORGE HAMILTON.

It would be utterly extravagant for a student to pay £30 for a qualification which he practically had in his degree. Every unnecessary expense would tend to prevent men entering the profession, and that would lead to quackery outside.

*By* Mr. MITCHELL-HENRY.

The diploma of the College of Surgeons of England could be obtained without an examination in midwifery, and there were hundreds of persons now practising who had never passed such an examination. He saw no harm in having seven licensing bodies in Scotland if the licences were properly inspected by the Medical Council. He did not believe that there was any competition downwards. The whole tendency during the last twenty or thirty years had been upwards. The system of permitting bodies which gave education also to give a licence to practise was a valuable part of a student's discipline, and was a wholesome arrangement. There could be no objection, however, to the appointment of any number of examiners to co-operate with the teachers.

*By* Mr. WHEELHOUSE.

The Faculty of Physicians and Surgeons in Glasgow, like all other corporations, granted a diploma without residence, but he could not say whether it granted its diplomas on inadequate grounds. They were granted after two or three examinations. He should be inclined to support a somewhat similar scheme to the *Staats Examen* in Germany, with one examination conferring one degree carrying a licence to practise. That would of course cut at the root of all conjoint schemes.

*By* Dr. PLAYFAIR.

Corporations in Scotland had voluntarily formed conjoint boards already, but they retained the power of giving separate diplomas. Every practitioner, he thought, should have a double qualification. He had no objection to the Medical Council nominating a number of extra-academical examiners greater than would be required, and the University Court making a selection from the list.

*By* Dr. CAMERON.

He did not know that the College of Physicians of Edinburgh granted last year 115 licences in medicine, but all their licences represented examinations in every department. The Faculty of Physicians and Surgeons of Glasgow last year granted thirty-four licences. They ranked as surgical qualifications, but those who obtained them had to undergo a complete examination. No remission of the rule was made except in the case of persons who had been examined by some other licensing body. He should be glad if the universities would recognise each other's examinations up to a certain point. The chief reason why English medical students went to Scotland was that they could get their M.D. degree without being graduates in arts. The great English universities had failed in their duties to the medical profession by not looking after the schools. If it was proposed to appoint assistant examiners for Scotland, to act with the university professors, the Government ought to pay the expense, instead of throwing it upon the poor students. He had no objection to its being made statutory that the universities should not give single qualifications.

*By* Sir TREVOR LAWRENCE.

In an extending science like medicine and surgery it was a great advantage to have a number of licensing bodies, provided they were kept up to a proper standard.

*By* Mr. MILLS.

The fees for graduation were the same in all the Scotch universities. There was no English university which exercised the same kind of discipline and control over the entire circle of medical teaching that the Scotch universities did. His objection to direct representation was that it would cause excitement and disturb the profession in their proper work.

*By* Mr. LOWE.

The education and training were of more importance than placing the mint mark on the students at the end of their studies. He did not believe it possible to secure equality and uniformity.

The Committee then adjourned to Friday.

## ARMY MEDICAL SCHOOL AT NETLEY.

THE thirty-ninth session of the Army Medical School was brought to a close on the 8th inst. The meeting took place as usual in the lecture theatre, that and the adjoining parts of the hospital buildings having entirely escaped from the effects of the recent fire. The gentlemen who have been attending the courses of instruction assembled at noon, and shortly afterwards the staff of the hospital, the professors of the school, and a large number of visitors took their seats on the platform. Among the latter were Lord Bury, K.C.M.G., Under-Secretary of State for War, who came from London to deliver the prizes to the successful competitors; Sir W. Muir, K.C.B., Director-General of the Army Medical Department; Sir John Commerell, V.C., K.C.B., one of the Lords of the Admiralty; Inspector-General Dr. Reid, Director-General of the Medical Department of the Navy; the Principal Medical Officer of Haslar Hospital, the Principal Medical Officer of Portsmouth Garrison, Surgeon-Major Ewart of the India Medical Board, together with many officers and gentlemen from the neighbourhood. After the names of the candidates for commissions in the Royal Navy and Indian medical services in the final order resulting from the combined marks gained by these gentlemen at the London and Netley examinations had been read by Professor Maclean, he explained that the names of the probationers in the Army Medical Service would not be read, as by recent orders they were to retain the same positions in the list as they held before coming to Netley, and that this list had been already published. Other official reports were read, and then Lord Bury gave

an address to the assembled candidates. In his discourse his lordship referred to the organisation of the school by his friend the late Lord Herbert, and its subsequent progress, to the changes which had taken place in the medical department of the army during recent years, and especially dwelt on the advantages which had been conferred on its officers by the new Medical Warrant, and indirectly, he believed, on the army at large. He warmly congratulated the candidates who had just completed the final steps necessary for obtaining their commissions in the various branches of the public medical service, and after some other observations on the careers which were now opening to them, asked the gentlemen who had been named as the winners of the several prizes to step forward. With a few kind and flattering observations to each gentleman, his lordship handed to them their respective honours. Mr. A. H. Keogh, of the Army Medical Service, carried off both the Herbert prize and the Martin memorial medal; while Mr. G. Kirker, of the Royal Navy, took the Parkes medal for practical hygiene. The visitors subsequently adjourned to the officers' mess-room for luncheon.

The number of candidates during the session has been very large—viz., 96. Of these 72 were probationers for the British service, 16 for H.M.'s Indian Army, and 8 for the Royal Navy. We publish elsewhere a list of the successful candidates for the Indian Army and Royal Navy. We have already published the names of the gentlemen who competed last December for commissions in the British service.

## TESTIMONIAL TO DR. FARR.

SINCE the publication of our last issue, the following names have been added to the committee which is being formed for the purpose of raising, among his friends and admirers, a testimonial fund for presentation to Dr. William Farr, F.R.S.

Earl Granville, K.G., F.R.S.
Lord Houghton, F.R.S.
Lord Aberdare.
The Right Hon. Sir Stafford Northcote, Bart, M.P.
The Right Hon. W. H. Smith, M.P.
Thomas Brassey, M.P., President of the Statistical Society.
John Walter, M.P.
William Spottiswoode, President of the Royal Society.
John Hainworth, F.R.S., Master of the Society of Apothecaries.
William Clode, Secretary, Registrar-General's Office.
J. de Cappelain, Highgate.
Professor W. T. Gairdner, M.D.
Professor Frankland, F.R.S.
Thomas Stevenson, M.D., F.R.C.P.
J. Napier Higgins, Q.C.
R. Druitt, M.D., F.R.C.P., F.R.C.S.
G. H. Philipson, M.A. M.D., F.R.C.P.
Cosmo G. Logie, M.D., F.R.S.E., Deputy Surg.-General.
W. A. Greenhill, M.D. Oxon.
D. B. Balding, F.R.C.S., Coroner for Hertfordshire.
J. T. Clover, F.R.C.S.

It is proposed shortly to call a meeting of the committee, of which due notice will be sent to its members, for the purpose of appointing an executive committee; a preliminary subscription list will soon after be published, which will include all those subscriptions already promised, and any that may be in the meantime notified to Mr. Noel A. Humphreys, of the Registrar-General's Office, Somerset House, W.C.

## HEALTH OF LARGE ENGLISH TOWNS.

### NINTH WEEK OF 1880.

THE rate of mortality in our large towns continues to decline. In twenty of the largest English towns, estimated to contain in the middle of this year seven millions and a half of persons, or nearly one-third of the entire population of England and Wales, 5408 births and 3181 deaths were registered last week. The births exceeded by 223, whereas the deaths were 94 below, the average weekly numbers during 1879. The deaths showed a further decline of 41 from the decreasing numbers returned in recent weeks. The annual death-rate in the twenty towns, which had decreased from 37·0 to 23·1 in the four preceding weeks, further fell to 22·1 last week. During the past nine weeks the death-rate in these towns averaged 26·9 per 1000, against 25·8 and 27·0 in the corresponding periods of 1878 and 1879. The lowest death-rates in the twenty towns last week were 17·5 in Bradford, 18·8 in Bristol, 19·0 in Birmingham, and 19·4 in Portsmouth. The rates in the other towns ranged upwards to 22·9 in London, 24·6 in Liverpool, 25·3 in Nottingham, and 28·5 in Plymouth. The death-rate in Plymouth has now shown a marked excess during many weeks, owing mainly to an exceptional fatality of measles.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which had slowly declined from 637 to 467 in the four preceding weeks, were 466 last week; they included 209 from whooping-cough, 99 from scarlet fever, 74 from measles, and only 29 from fever, mainly enteric. The annual death-rate from these seven diseases averaged 3·2 per 1000 in the twenty towns, and ranged from 0·4 and 0·7 in Portsmouth and Wolverhampton, to 4·9 and 9·7 in Hull and Plymouth. Whooping-cough showed the largest proportional fatality in Salford, London, and Plymouth; measles in Plymouth, Hull, and Nottingham; and scarlet fever showed increased prevalence in Sheffield. Of the 13 deaths referred to diphtheria, 5 occurred in London, and 3 in Manchester and Salford. Fever, principally enteric, caused 14 deaths in London, and 5 both in Liverpool and in Sheffield. Eight more fatal cases of small-pox were recorded in London, and one in Bristol, but not one in any of the eighteen other large provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had steadily increased from 80 to 163 in the five preceding weeks, further rose to 185 on Saturday last; 49 new cases of small-pox were admitted to these hospitals during last week, against 58 and 48 in the two previous weeks. The Highgate Small-pox Hospital contained 12 patients on Saturday last, 10 of whom were suffering from small-pox.

The fatality of lung diseases showed a further decline last week. The deaths referred to diseases of the respiratory organs in London, which had declined from 1557 to 459 in the four preceding weeks, further fell to 390 last week, and were 80 below the corrected average in the corresponding week of the last ten years; 258 resulted from bronchitis, and 91 from pneumonia. The annual death-rate in London last week from diseases of this class was equal to 5·6 per 1000, and corresponded with the death-rate from the same diseases in Liverpool.

# Correspondence.

"Audi alteram partem."

## FUSSY SANITATION.

*To the Editor of* THE LANCET.

SIR,—In the third leader of your last issue the following passage occurs:—"There are probably, as medical officers of health will tell us, not a few things in which the law may be amended in order to strengthen their hands in dealing with infectious diseases, but if we are to give regard to history it is highly necessary that in so strengthening them the Legislature should not at the same time foster that wild fear of contagion that has been the bane of administrative efforts in all great epidemics. Yet there is reason to fear that the evil here referred to is being brought about amongst us."

Upon this text I, as an old sanitarian, having the additional advantage of a great many years of active practice amongst all classes of the people, and, therefore, the opportunity of observing the progress of the public opinion on medical and sanitary subjects, would venture to make a few observations.

In the first place, I do not think that those remarks of yours, with the caution they convey, are made a day too soon. With a Government in power which may any day recur to the dogma of *sanitas sanitatum, omnia sanitas*, it behoves all who have the real progress of sanitary science at heart to see that that science will not be brought into con-

tempt, or its cultivators made ridiculous, by the vagaries of individuals or the ignorant fears of the public. That there is danger of these results the proceedings of certain municipal authorities, as well as the published wishes of a few sanitarians, I think sufficiently prove.

Now, Sir, in the course of forty years I have watched the progress of public feeling with regard to infectious and contagious diseases very closely. From the most complete ignorance and apathy with regard to their incidence and mode of propagation which prevailed half a century ago, and which were contemporary with, or probably caused by, the enormous decline in the ravages of small-pox which resulted from the firm establishment of vaccination as a national measure, the public mind has passed through various phases towards its present active, observant, but somewhat terrified aspect. Occasionally panic-stricken by the occurrence of threatened epidemics of such direful diseases as cholera, relapsing and yellow fevers, plague, &c., it has almost invariably, when the danger passed away, relapsed into its normal state of unreasonable trust in good luck or of simple stupid apathy. Within the last few years, however, a better state of mind has prevailed. The establishment throughout the whole of the kingdom of a body of medical officers of health, discharging difficult duties with great tact and success, has given confidence to the public mind in the advantages and benefits of sanitary science which it never before possessed. Results have been brought under the cognisance of municipal bodies which neither ignorance nor incredulity has been able to gainsay. The Government also is firmly impressed with the idea that, with some imperfections and sins of omission and commission, medical officers of health are everywhere strengthening its hands by valuable reports, and by excellent work justifying, in the highest degree, their appointment.

If such be the valuable standpoint to which we have attained, enabling us to work upon the Government, the sanitary authorities, and the public mind, according as circumstances may arise, does it not behove all sanitary officers to beware how they push valuable principles too far, or let zeal outrun discretion? More than all, is it not advisable to avoid the danger of splitting up into hostile camps, or calling in the public to decide upon points on which they have no sound knowledge? Yet this is what is to be feared as likely to come to pass anent the question of the registration of contagious diseases. Some municipalities have already sought and obtained most extensive powers, which must have been suggested to them either by their own medical officers of health, or by other sanitarians. The question is, Are these powers salutary, and such as can be worked without too much friction against public feeling, and are they not likely to cause other evils whilst professing to remedy one or two? I am not quite certain that all those authorities which have obtained these powers with regard to infectious diseases, have already provided themselves with hospitals in which the sick of those diseases can be isolated, but I do know that some are contemplating the acquisition of such powers in the absence of any such provision. Ought it not, in common sense, to be made compulsory for any power to have all cases of infectious disease reported to its sanitary officers, to provide beforehand sufficient accommodation for isolating them when necessary? What is the use of the medical officer knowing that scarlet fever or diphtheria is to be found in a certain house unless he has the clear right to enter that house and remove, if necessary, the sick person to a hospital provided for such cases? The want of compulsory provision of hospitals for the infective sick is one of the greatest blots upon the present Sanitary Acts, and therefore I cannot but think that the Parliamentary Bills Committee of the British Medical Association have neglected to use an obvious and logical argument for their provision when they were insisting, and in the main rightly insisting, upon the provision of some better means whereby the sanitary officers may be made acquainted with the occurrence of such cases than at present exist. I know that it is argued by some that, as the law now is, the medical officer of health has no power to enter a dwelling to satisfy himself as to the existence of infectious disease, and no power, except in a few cases, to remove the sick to a hospital when he has discovered it. If this is the true reading of the Act, then another provision is required—namely, one which shall give the medical officer power so to enter, and also power to remove cases which cannot properly be treated and provided for at home, with reasonable safety to others, to a proper hospital. For myself I hold, and practise accordingly, never having met with rebuff or opposition, that that power *is* given by the present Acts. "All persons ill of any infectious or contagious disease, not having proper lodging or accommodation, may be removed to any hospital already provided for such cases by the authority." The word "accommodation" must have reference to the nature of the case. But how can such cases be ascertained unless the medical officer have power of entry, and who is to be the judge of what constitutes "proper lodging and accommodation" but himself?

The uselessness of an extended registration of cases of infectious disease will be apparent to anyone accustomed to work the Sanitary Acts, unless, concurrently with such registration, definite instructions are laid down to guide the officer in dealing with such cases, or, at least, that be made clear in the present Acts which to the minds of some medical officers I know is now not clear. The weight of opinion appears to be against making the medical practitioner the medium of communicating the fact of the existence of a case of zymotic or contagious disease to the authorities; but it is recognised as his duty duly to inform the person in charge of any such case as to its nature, leaving the reporting the case to the authorities to be done by him. It is argued that, if the medical man were obliged to report direct to the authorities, it would lead to his not being called in in cases where secrecy was desired. But would things be much better if the parent, or person in charge of the sick, were obliged himself to report the case immediately on receipt of a certificate from the medical attendant? Would there not be the same temptation to dispense with the services of a medical when he would be only the *indirect* instead of the *direct* medium of communication of the fact to the authorities? I think so; and therefore, if the preservation of the public from the spread of these disorders is to be held to be the paramount aim of legislation, it appears to be almost indifferent which party, the medical attendant or the occupier of the premises, makes the necessary communication.

But expediency is not a safe guide. Professional morality must be the first consideration, and that morality demands that every medical man who discovers his patient to be labouring under any dangerous infectious disease should warn the patient himself, or the person in charge of him, and point out the proper steps to be taken to avoid the spread of the disease. This, we know, every conscientious medical man does now. He would be neglecting an obvious duty were he not to do so. Moreover, the medical attendant has the best means of knowing whether such infected person "be without proper lodging and accommodation," according to his case, and whether removal is demanded in the interests of the other inmates of the house or the public. Medical men are at present in the habit of reporting *bad* cases of this kind to the medical officer of health. It is only necessary to make it *incumbent* upon them, on payment of a proper fee, to give immediate notice of *such* cases without waiting to see if the person in charge will be public-spirited enough to do so. In these cases the medical officer of health would have a clear right of entry, and it would also be his duty to have the patient removed from any room or house where his presence would be dangerous to others.

If there be any weight in these observations—which, by the way, are the result of ample experience as a medical officer of health—it follows that the recommendations of the Parliamentary Bills Committee of the British Medical Association, though of much value, go too far, or not far enough. Too far, as you, Sir, or I think, inasmuch as by making the registration of *every* case of infectious disease compulsory, bringing them *all* under the cognisance of the sanitary authority, that feeling of dread and panic so much to be deprecated when epidemics arise, would be intensified, to the injury of the public good and the hindrance of sound sanitation. They do not go far enough, I think, inasmuch as they allow a loophole by which such registration may be avoided. The medical man would be shunted when his certificate was dreaded, or, if called in, his certificate would in many cases be put into the fire, unless it was known that *he* might give the information to the authority.

Of course, the seventh section can only be intended to be used in great emergencies. I can only say that such emergencies *might* justify the *scare* it would give to the whole public. But were provisions for carrying out *temporary* orders as to some contagious disease to be affixed to the church doors, the inhabitants of that town or district would find themselves well isolated from their neighbours and customers for an indefinite time.

In conclusion, I would point out, as I have already stated,

that the public mind is rapidly being enlightened as to the incidence and nature of infectious disease. That whilst it is advisable to increase that light, and direct it to proper efforts, it is quite equally desirable that the foolish panic and cowardly dread of this kind of disease now prevailing should not be fostered and pampered by two fussy legislation. Something must be trusted to education, and the diffusion of the knowledge of sanitary science amongst all classes, the poor especially. The time will come when the public will render intelligent aid to the authorities in these matters; whilst if their ignorant fears be now played upon to a greater extent than necessary, they will take refuge in evasion or opposition to even reasonable measures.

I am, Sir, your obedient servant,

WILLIAM STRANGE, M.D.,

Worcester, March 1st, 1880. Medical Officer of Health.

## "THE CORONER'S FUNCTION."

*To the Editor of* THE LANCET.

SIR,—The scheme propounded in your leading article on the "Coroner's Function," for combining certain State duties under the office of the Medical Officer of Health, is one which commends itself as being both practicable and as meeting many anomalies and deficiencies which now prevail in the varied administrations of the medical world.

I venture to add to your suggestions; and to draw from a similar proposal which I made in 1878 at the North Wales Poor Law Conference (see Report for that year), and in a paper published in the August (1879) number of the "Sanitary Record." Whilst advocating combined sanitary districts, it was proposed also to combine allied offices under the medical officers of health; and it was shown that by this combination sanitary work would be more efficient, and also that the present salaries attached to these various offices would yield a handsome income to an independent officer without further assistance from rates. The offices which it was proposed to combine under the medical officer of health are those of the "certifying factory surgeon," the "superintendent registrar of births and deaths," and that of "coroner." Each of these offices works in a manner in duplicate and anomalously, either with the functions of the Medical Officer of Health or with some other Court of Inquiry. Thus the Public Health Act, 1875, section 91, brings small factories only under the supervision of the medical officer of health, leaving the large ones under the certifying factory surgeon. And yet the medical officer of health is required by the Local Government Board General Order of Nov. 11th, 1872 (section iv., paragraphs 10, 14), to inquire into processes of trade, and to report upon appropriate means to prevent injury to health therefrom. Again, the medical officer of health is by the same general order (paragraph 14) called upon to deal statistically with the mortality in his district, his data being gathered from copies of the registers supplied him at the cost of the sanitary authority by the sub-district registrars. The superintendent registrars are not called upon to deal with the information their registers afford, and do but transmit the sub-district returns to the Registrar-General, and, as occasion may require, supply duplicate certificates to such persons as may require them. Obviously by combining these two offices with that of the Medical Officer of Health an administrative and pecuniary economy would be effected.

The Coroner's office, if its utility has not altogether ceased, is certainly in need of reform. At the present time important inquiries conducted in this court are for the most part repeated in either the police courts or by the Board of Trade. And for the less important inquests, a personal inquiry, conducted as by the procurator fiscal in Scotland, would meet every requirement, to which should be added, to complete the designs of the Registration Enactments, a similar inquiry into every uncertified death.

By collecting together under one administrator the scattered forces which have been called into existence for the protection of life and health, a greater proficiency will pertain to each office. By this means, and in the manner you, Sir, indicate, skilled medico-legal functionaries will fill the offices of the Medical Officer of Health. Ample work and remuneration are at hand from existing sources in limited and workable districts; and the whole should be under the control of a Minister of Health.

I am, Sir, your obedient Servant,

Denbigh, Feb. 25th, 1880. J. LLOYD-ROBERTS.

## THE TREATMENT OF ACUTE RHEUMATISM.

*To the Editor of* THE LANCET.

SIR,—Dr. Barton's wise remark about "the search for new remedies" is exceedingly well timed, and his brief record of his large experience exceedingly interesting; but his results would acquire a new value if he could only see his way to put them into a statistical form. The obvious answer to Dr. Barton's astonishment at my omission to mention iodide of potassium and opium is, that the scope of my paper was necessarily limited, and did not include either of these drugs.

Dr. Jacob states that "subsequent observers (to Dr. Fuller) have failed to secure by alkalies a like success." No doubt many have so failed, and I have distinctly said so; but, on the other hand, many eminent physicians have recorded most gratifying successes. Have the failures not been due in some measure to the lack of that care and assiduity which characterised Dr. Fuller's practice? Many surgeons fail to obtain the same brilliant results with the antiseptic treatment of wounds as my esteemed teacher, Professor Lister. But do they follow his practice rigorously in all its details? The percentage of cardiac complications in *all* the groups of cases of acute rheumatism treated by the salicylate of soda, to which Dr. Jacob refers, is greater than in Dr. Fuller's practice, with the single exception of the German group, which is less than a fourth of the number of Dr. Fuller's cases, and so may contain fallacies from which a large group is more likely to be exempt.

The error into which I have fallen in reading Dr. Pollock's "Notes on Rheumatism" is one which I greatly regret, but which I cannot regard as unnatural. I read his excellent *brochure* without prejudice of any kind, and I came to the only conclusion regarding his therapeutic leanings that seemed possible—namely, that he is a strong partisan of the new method of treatment. This being so, I examined his appendix in the hope of finding an exceptionally brilliant record of experience. I found, instead, "three fatal cases in a total of sixteen." I am always glad to hear of a low rate of mortality, and I need hardly express my pleasure in finding that the total was between sixty and seventy. Still, even this proportion of fatal cases is too high, in my opinion, to entitle anyone to speak of salicylate of soda in the unqualified terms employed by Dr. Pollock.

Dr. Whipham's explanation is gratifying; but he must remember that the mention of "no cardiac lesion" was made in the note of October 25th, while the cardiac affection to which I referred is spoken of in the notes of October 26th and 27th and November 4th. However, even admitting that I was led astray by the notes of his case, the question at issue is not seriously affected.

I had three objects in view in writing my paper:—1st. To show that the virtues of the new method have been vastly overrated, and its dangers greatly underrated. 2nd. To prove that the published results of other methods should not be despised. 3rd. To draw the attention of the profession to the importance of distinguishing clearly between continued and relapsing cases. It stands to reason that if a group contains a large proportion of relapsing cases, the average duration of rheumatic symptoms and the average residence in hospital must be greater than in a group which contains a small proportion of such cases. This consideration should be kept in mind in estimating the value of the statistics of St. George's Hospital and the Dundee Royal Infirmary.

I am, Sir, your obedient servant,

Dundee, Feb. 28th, 1880. ROBERT SINCLAIR, M.D.

## THE STAMPING OUT OF RINGWORM.

*To the Editor of* THE LANCET.

SIR,—The profession is much indebted to Dr. Alder Smith for his valuable contribution to the subject of the treatment of ringworm, which has appeared in your columns lately. We have been taught some useful facts as to remedies, especially the mode of applying them, and the extent to which they may be pushed.

Even with the supervised and vigorous treatment which Dr. Smith's opportunities permit, ringworm, excepting in a few recent cases, is shown to take months to cure, while

some cases may be said to be incurable. What degree of such vigorous treatment or supervision do the bulk of hospital patients receive? It is well known that children with ringworm are not, as a rule, admitted to hospitals, but treated in the out-patient department. As a consequence the cases drag on month after month, until, tired of one hospital, the parents try another, or possibly go the round. Probably long before this the case has drifted into "the diffused form," in which the ordinary appearances of ringworm are absent; the child is considered to be cured and sent to school. In this way ringworm is spread, and if the matter were inquired into, it is not unlikely that many schools, and especially school-board schools, would be found to be hot-beds of ringworm.

The point urged, then, is that our present hospital system of treatment of ringworm is utterly unsatisfactory, and, in many instances, mere waste of time and drugs. The remedy which naturally suggests itself is systemised intelligent aid from nurses and attendants at out-patient departments, so that methods might be properly carried out. (The parents of children rarely have the time, inclination, or ability to treat them.) But much more good might be done in the direction of stamping out the disease by some special system of medical supervision of school-board schools.

I remain, Sir, yours, &c.,

ALFRED SANGSTER, M.B.,
Physician in Charge of Skin Department, Charing-cross Hospital.

Feb. 12th, 1880.

## IS INSANITY CAUSED BY DRINK?

*To the Editor of* THE LANCET.

SIR,—The question raised by Dr. Mortimer-Granville in his letter appearing in THE LANCET of the 21st ult. is, I think, by no means an unimportant one.

I have now been specially engaged in the treatment of mental affections for a period of some thirty-six years. In the course of my practice I have met with many cases of insanity in which there was the propensity to take stimulants in excess; but in every case in which I had the means of obtaining reliable information as to the history of the patient I have been able to trace the mental disease as existing before the intemperance.

I am, Sir, yours faithfully,

JOSEPH SEATON.

Halliford House, Sunbury, March 8th, 1880.

## EXTENSION OF THE FUNCTIONS OF MEDICAL OFFICERS OF HEALTH.

*To the Editor of* THE LANCET.

SIR,—I have read with pleasure your able leading article of last Saturday on the various subjects about to occupy the consideration of the present Parliament, which more or less affect the medical profession—to wit, the Coroner's Bill and the Lunacy Laws; and while agreeing with you that the duties under these laws devolving upon a public officer should be put upon the medical officers of health, I fail to see how these gentlemen as now appointed can, satisfactorily to themselves, perform them.

As you state there will be, in all likelihood, a considerable alteration in the laws, and if the medical officers of health are to be called upon to undertake more onerous duties they must of necessity be entirely relieved from private practice; and to accomplish this it will be necessary in many cases to enlarge the area of districts, in order that an adequate salary can be given.

Again, besides sanitary duties and those proposed under the Coroner's Bill and the Lunacy Laws, there are others that might, with all propriety, be handed over to the medical officer of health—namely, those of inspector of retreats under the Habitual Drunkards Act, and of certifying factory surgeon.

To enable them to perform the duties mentioned above, I can see no other course that can be followed than for the Government to appoint the medical officers of health, and pay them such salaries as they can comfortably live upon, and then Government might repay itself in seven years, by making a levy upon the various authorities to whom the medical officer of health lent his aid.

The corps of medical officers of health ought to be under a chief who would have power to regulate appointments and remove officers from one station to another, as it does in the other branches of the public service, and it might have various grades or ranks, with corresponding rates of pay, according to service and ability. No one should be allowed to remain in this service who has attained the age of sixty-five years.

Feeling certain that it is only by such an arrangement that the proposals mentioned in your last impression can be carried out, and having been a medical officer of health ever since the Public Health Act came in force, I am induced to send you this communication.

I enclose my card, and remain yours faithfully,

Feb. 24th, 1880. PUBLIC OFFICER.

## EDINBURGH.

*(From our own Correspondent.)*

DURING the past fortnight Dr. Thomas Keith has performed three ovariotomies in the Royal Infirmary, all being of special interest. One was a semi-solid tumour, which had existed for two years in a patient who had been thrice pregnant during that period. There were no adhesions. A second was a case of burst cyst. The patient was in a poor state of health; she had been in hospital for some time, suffering from pleurisy and chest disease, when the sudden rupture of the cyst called for operative interference. The third case was one of a girl about fourteen years of age, who had never yet menstruated. There were some anterior adhesions. Remarking on this case, Dr. Keith stated that he had seen an ovarian tumour in a seven months fœtus; that such growths might be met with at any period of life, and that he had himself operated on patients where age varied from nineteen to over seventy years. The burst cyst was removed in the ward and the other two cases in the large theatre. The usual antiseptic precautions were adopted. It is much to be regretted that the light in the theatre is so faulty that Dr. Keith fears he must be compelled to cease operating there until some new mode of illumination be devised.

Among many other major operations, there have been two lateral lithotomies. In one case a large discoid stone was removed by Professor Spence, and in the other a small uric acid calculus, by Mr. Chiene, from the bladder of a man whose general state of health contra-indicated crushing. In both cases the rectangular staff was employed, the incisions, however, being made in the ordinary fashion. The patients are doing well.

In a discussion which took place at the Medical and Chirurgical Society on the reading of a paper on "Death during the Administration of Chloroform," it appeared to be the general opinion of the surgeons present that this anæsthetic was, on the whole, the best. That in cases of danger it was necessary to see that the glottis was open, and to begin artificial respiration (Silvester's) at once. Special stress was laid upon the point that the pulling forward of the tongue forcibly did not open the glottis in some cases, and Mr. Bell directed attention to a case of his own, in which he had overcome this difficulty by pushing his finger down to and opening the larynx. Professor Annandale spoke of a death which happened at the conclusion of an operation for hernia, and in which, as revealed by post-mortem examination, some vomited food had passed into the bronchi and choked the patient. Dr. Foulis preferred ether to chloroform and Howard's mode of artificial respiration to Silvester's. Dr. Duncan remarked that in performing artificial respiration the feet of the patient should be secured, as this prevented him from being pulled off the table during the manipulative procedure. Dr. Watson drew attention to the title of the paper, and stated that many deaths took place during the administration of chloroform, not from it. He had seen a case of death from epilepsy while chloroform was being administered.

Professor Fraser's lecture on "Alcohol, its place and function," delivered at the request of the University and New College Temperance Society, is about to be published. Dr. Fraser expressed himself as favourable to the moderate use of stimulants, and had more hope in the advance of education and knowledge as a means of checking the abuse of alcohol than in abstinence.

## PARIS.

*(From our own Correspondent.)*

IT has transpired that the Minister of Public Instruction wishes to create a new chair of Practical Morbid Anatomy at the Faculty of Medicine, and that he intends to bestow it upon the well-known microscopist, M. Cornil. No objection can be made to the selection, and, indeed, upon the creation of a new chair. The minister has the privilege of appointing its first occupant; but it is contended that the chair itself is both undesirable and unnecessary, inasmuch as it will lessen the importance of those of Pathological Anatomy and Theology, now occupied by MM. Charcot and Robin, at present affording the teaching which it is proposed to inaugurate. Of the two professors, M. Charcot has the more reason to be displeased with the project, as his teaching would be reduced to a course of theoretical lectures. But it is quite possible that this difficulty will be smoothed over by the creation of another new chair, one of Nervous Pathology, which will gratify the life-long aspirations of the Salpêtrière professor, and so extricate him from the anomalous position he has so long occupied.

It is proposed to create a "disinfecting staff" in Paris analogous to that which now exists in London, and which is intended to combat the dissemination of infectious disease. The officials entrusted with these functions would be allowed to use the most stringent measures, and these would seem justified by certain facts lately brought to light, and particularly by the extreme prevalence of small-pox in one of the quarters of Paris, that of the *Quinze-vingts*.

The Faculty of Medicine of Paris has always been notorious for its internal dissensions, and it has lately had a little difference of opinion with the provincial schools. The question at issue is one which is now on its trial both in England and France—that of medical decentralisation. The provinces claim that the *Concours d'agrégation*, which now takes place in Paris for the whole of France, should be held in the different universities to which candidates aspire. This has been opposed, on the ground that the existing state of things secures a high standard and a fairness of examination, which would be compromised by local favouritism if the competitions were held in provincial towns by provincial professors. And although it is not denied that a diligent provincial student may become a very competent practitioner, it is generally thought that some sojourn is advisable in the brain-forcing atmosphere of a great [city to develop the qualities which are necessary to a professor.

A clause in the Ferry Education Bill, of which *l'article 7* has become so famous, enacts the abolition of *inscription* fees for higher education. In consequence of this, a medical curriculum in France, which has always been cheap enough, will become absolutely gratuitous. As regards the other branches of higher education, this measure may be free from objection, but it is surely not to the public interest the needy should be tempted to join the ranks of a profession so overcrowded and ill-paid as that of medicine.

## ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an ordinary meeting of the Council, held on Thursday last, after the transaction of preliminary routine business, Mr. Bellamy and Mr. M'Carthy were elected members of the Board of Examiners in Anatomy and Physiology, in the place of Mr. John Wood and Mr. Hulke, who had resigned in consequence of being appointed to the Court of Examiners in Surgery.

The report of the Committee on By-laws relating to fees was considered at length, and with some exceptions was approved and adopted, subject to confirmation at the next meeting, when Mr. Simon will discuss the whole question of the finances of the College.

The President made a statement relating to the proposed International Medical Congress, and it was resolved that the President for the time being shall be the delegate from the College.

The recommendation of the committee on examinations in anatomy and physiology, to appoint a substitute examiner in anatomy and in physiology from among the Fellows who have already served on the Board, in the event of any examiner being through illness or any other unavoidable cause unable to take part in any examination of the Board, was adopted.

# Medical News.

NAVAL MEDICAL SERVICE. — The following is a list of successful candidates for commissions in this service, with the number of marks gained by them in the combined London and Netley examinations held on March 8th :—

| | Marks. | | Marks. |
|---|---|---|---|
| G. Kirker .. .. .. | 5440 | G. A. Bankier .. .. | 3955 |
| T. D. Gimlette .. .. | 4350 | J. A. MacMunn .. | 3671 |
| W. Tait .. .. .. | 4320 | J. Brunt .. .. .. | 2876 |
| J. Crowley .. .. .. | 4320 | M. Mackenzie .. .. | 2821 |

INDIAN MEDICAL SERVICE. — The following is a list of successful candidates for commissions in this service, with the number of marks gained by them in the combined London and Netley examinations held on March 8th :—

| | Marks. | | Marks. |
|---|---|---|---|
| G. W. P. Dennys .. | 4964 | A. C. Thompson .. | 4308 |
| J. W. W. Macnamara | 4920 | F. Burnose .. .. .. | 4226 |
| H. O. Stuart .. .. | 4768 | G. J. Ward .. .. .. | 4204 |
| J. C. Marsden .. .. | 4552 | F. C. Reeves .. .. | 4153 |
| J. Sykes .. .. | 4503 | J. L. Poynder .. .. | 4012 |
| J. M. W. Stewart .. | 4450 | J. Hoey .. .. .. | 3831 |
| J. F. Tuohy .. .. | 4393 | A. G. Collington .. | 3755 |
| A. R. Campbell .. | 4375 | C. A. Daubney .. .. | 3628 |

APOTHECARIES' HALL. —The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on March 4th :—

Waterhouse, George Beardmore, London Hospital.

The following gentlemen on the same day passed the Primary Professional Examination :—

Henry Arthur Fotherby, Guy's Hospital; Matthew Carrington Sykes, St. Bartholomew's Hospital.

ROYAL COLLEGE OF SURGEONS.—At the preliminary or arts examination for the diplomas of Fellowship or Membership of the College, which was brought to a close on Friday last, there were 387 candidates—viz., 106 for the Fellowship, and 281 for the membership.

THE Board of Guardians of the Croydon Union have conferred upon Mr. Alfred George Roper, F.R.C.S. Eng., lately medical officer of the union, an annuity of £100.

ALDERMAN SIR S. H. WATERLOW, M.P., and Sir John Lubbock, M.P., have each subscribed £25 towards the erection of a Saunder's Memorial (Children's) Ward in connexion with the West Kent General Hospital.

THE coroner's jury returned a verdict of "Accidental death" in the case of Mr. E. O. Jones, of Carmarthen, to whose melancholy decease by drowning we referred last week.

A FIRE attended, it is to be hoped, by comparatively little damage, broke out in the central block of Netley Hospital on the 4th inst. The flames were speedily subdued by seamen and marines landed from the *Hector* guardship, in conjunction with the hospital staff.

THE foundation-stone of an addition to Rochester Hospital, to be built at a cost of £2,242, in commemoration of the 800th anniversary of Bishop Gundulph, the founder of the institution, was laid last week by the Bishop of St. Albans. The new building is intended for out-patients.

LONGEVITY.—The following rare examples of old age have been recorded in the obituary column of a contemporary during the last fortnight — viz., twenty-five females have died at ages ranging from eighty-five to ninety-nine, amounting in the aggregate to 2205 years, giving an average of eighty-eight years and over two months to each. In the same period the deaths of twenty-one males were announced, whose ages ranged from eighty-five to ninety-eight, giving a total of 1846 years, with an average to each of nearly eighty-seven years and eleven months. One of the males, Mr. Benjamin Tribe, who had attained the age of ninety-five, was a member of the medical profession, long a resident at Chatham, and who passed his examination at the Royal College of Surgeons sixty-seven years ago, being then twenty-eight years of age.

VACCINATION GRANT.—Mr. J. C. Roberts, of South Peckham, has received a Government grant of £37 11s. for successful vaccination (third time).

BRISTOL GENERAL HOSPITAL.—The annual meeting of the friends of this institution was held on the 8th inst. The report stated the income for the past year to have been £11,438, and the ordinary expenditure £6398, in addition to £1137 for the erection of a new laundry, &c. The committee have with regret to call attention to the falling off of the annual subscriptions, which it appears have been decreasing for years past. This state of things is a discredit which the wealthy citizens of Bristol should feel in honour bound to remove without delay.

BEQUESTS ETC. TO MEDICAL CHARITIES.—The Rev. John Cartwright, of Durham, bequeathed £3000 to the Durham County Hospital, and £2000 to St. Thomas's Hospital, in addition to moneys (amount not stated) in two banks. Miss Jane Steele, of Clifton, has bequeathed £1000 to the Bristol Royal Infirmary, £1000 to the Bristol General Hospital, £200 to the Bristol Dispensary, and £200 to the Bristol Dispensary for cure of complaints of the eye. The Folkestone Dispensary and Infirmary has received £500 from Dr. Bowles, and £100 under the will of Mr. James Kelcey. The Kent and Canterbury Hospital has received £300 under the will of Mrs. Jane Tomlin, of Northdown, Thanet. The London Hospital has received £100 from "T. A." Mrs. James Packe has given seventy-five guineas to the Charing Cross Hospital. The Hospital for Women has received £50 from "A. L." Mrs. Ellen Penn, of the Cedars, Lee, has given £100 to the Royal Kent Dispensary.

# Medical Appointments.

*Intimations for this column must be sent* DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ALLEN, A. H., F.C.S., has been appointed Analyst for the Borough of Doncaster. 12s. 6d. each analysis.

BEATON, D., M.D., L.R.C.S.Ed., has been reappointed Medical Officer for the Ryde District of the Isle of Wight Union.

BISSHOPP, J., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Tunbridge Wells Provident Dispensary, vice Ticehurst, resigned.

BRADY, G. S., M.D., M.R.C.S.E., has been reappointed Medical Officer to the Sunderland Hospital for Sick Children.

BUCKLE, J., M.R.C.S.E., L.S.A.L., late House-Surgeon at the Brighton Children's Hospital, has been appointed Resident Medical Officer to the Western Branch of the Brighton and Hove Dispensary.

CASTLE, H. T., M.D., L.R.C.S.Ed., has been reappointed Medical Officer for the Shorwell District of the Isle of Wight Union.

COATES, W. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Tunbridge Wells Provident Dispensary.

FOSTER, W. F., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer for the Arreton District of the Isle of Wight Union.

GILL, J., M.D., L.R.C.P.Ed., L.F.P.S.G., has been appointed Physician to the Stratford-upon-Avon Infirmary.

HENRY, G. F., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident Medical Officer to the Bury St. Edmunds Friendly Societies' Medical Association.

HOFFMEISTER, W., M.D., L.R.C.P.L., M.R.C.S.E., has been reappointed Medical Officer for the Cowes District of the Isle of Wight Union.

MEERES, C., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer for the Brading District of the Isle of Wight Union.

MURPHY, J., M.D., B.A., has been appointed Surgeon to the Sunderland Hospital for Women and Children, vice Smith, resigned.

PHELPS, W., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer for the Yarmouth District of the Isle of Wight Union.

POWELL, J., L.S.A.L., has been appointed Medical Officer to the Kentchurch District and the Workhouse of the Dore Union.

SAVILE, R., M.D., M.R.C.S.E., has been appointed Medical Officer for the Nafferton District of the Driffield Union.

SIMPSON, W. S., L.R.C.P.Ed., L.R.C.S.E., has been appointed Medical Officer to the Workhouse of the Pontefract Union, vice Atkinson, resigned.

STAMFORD, W., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Tunbridge Wells Provident Dispensary.

STICKLAND, S., L.R.C.S.Ed., M.R.C.S.E., has been appointed Medical Officer for the Godshill District of the Isle of Wight Union.

STORY, Mr., of St. Mark's Ophthalmic Hospital, Dublin, has been appointed an Examiner in Ophthalmic Surgery in Trinity College, Dublin, vice Rainsford.

TOTTIETT, F. B., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer for the Whippingham District of the Isle of Wight Union.

WALMSLEY, F. H., M.D., M.R.C.S.E., has been appointed an Assistant Medical Officer to the Leavesden Asylum for Imbeciles.

WATERWORTH, E. A., M.D., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer for the Carisbrooke District of the Isle of Wight Union.

WELFORD, G. E., M.D., M.R.C.S.E., has been reappointed Medical Officer to the Sunderland Hospital for Sick Children.

WOODWARD, C., M.D., M.K.Q.C.P.I., F.R.C.S.I., has been appointed Medical Officer for the First District of the Ware Union.

# Births, Marriages, and Deaths.

## BIRTHS.

ADAMS.—On the 6th inst., at Rippingale, Lincolnshire, the wife of George Norris Adams, M.D., of a son.

BATEMAN.—On the 2nd inst., at Whitchurch, Oxon., the wife of Francis Bateman, M.B. Lond., of a daughter.

CASSIDY.—On the 29th ult., at the County Asylum, Lancaster, the wife of Dr. D. M. Cassidy, of a son.

CAUSTON.—On the 29th ult., at Pomona-place, Hammersmith, the wife of William H. Causton, M.R.C.S.E., of a son.

DUCAT.—On the 4th inst., at Gloucester House, St. Paul's-road, Highbury, the wife of Andrew D. Ducat, M.D., of a daughter.

FAIRBANK.—On the 29th ult., at Moulsey House, Windsor, the widow of the late Dr. Fairbank, prematurely, of a daughter.

## MARRIAGES.

BUTLER—DIPLOCK.—On the 26th ult., at Christ Church, Turnham-green, Chiswick, Joseph M. J. Butler, of Safli, Morocco, and of London, Chevalier and Consul of Portugal and of Brazil, to Esther Martha, eldest daughter of Thomas Bramah Diplock, M.D., of Arlington House, Chiswick.

SCHOFIELD—JACKSON.—On the 23th ult., at Barnabury, Robert Harold Ainsworth Schofield, M.A., M.B., F.R.C.S., second son of the late Robert Schofield, of Rochdale, to Elizabeth Jackson, youngest daughter of the late Sidney Vaughan Jackson, of Ballina.

## DEATHS.

BATEMAN.—On the 29th ult., at Whitchurch, Oxon., Francis Henry, the beloved son of Francis Bateman, M.B. Lond., aged 13 months.

BRAMWELL.—On the 26th ult., at Nottingham, Charles Crighton Bramwell, M.D., in his 59rd year.

CORNISH.—On the 7th inst., at Taunton, Jane, the wife of Charles Henry Cornish, F.R.C.S., Mayor of Taunton, aged 67.

MACALDIN.—On the 2nd inst., at Tavistock-square, London, James Jasper Macaldin, M.D., in his 69th year.

MAGINNISS.—On the 28th ult., at Camden-road, of apoplexy, after a few hours' illness, Robert Maude Maginniss, B.A., M.D., within a fortnight of attaining his 26th year.

RICHARDSON.—On the 28th ult., at Baker-street, Portman-square, Mark Richardson, M.D., late of the Bengal Medical Service, in his 75th year.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

## BOOKS ETC. RECEIVED.

G. BELL & SONS, London.
The Constitution of the Earth. By R. Ward.

DAVID BOGUE, London.
The Secret of a Good Memory. By Dr. J. Mortimer-Granville.

J. & A. CHURCHILL, London.
Cooley's Cyclopædia of Practical Receipts.
Indian Notes. By F. R. Hogg, M.D.
Diseases of the Testis. By S. Osborn.

KEGAN PAUL & Co., London.
Chapters from the Physical Geography of the Earth. By Arthur Nicolls, F.G.S.

LONGMANS, GREEN, & Co., London.
The Stoics, Epicureans, and Sceptics. Translated from the German of Dr. E. Zeller by O. J. Reichel, B.C.L.
Path and Goal. By M. M. Kalisch, Ph.D., M.A.
Transactions of the Obstetrical Society of London.

MACMILLAN & Co., London.
The Emotions. By James M'Cosh, D.D.

J. VAN VOORST, London.
Water Analysis. By E. Frankland, Ph.D., F.R.S.

House and Home. Vol. II.—Fraser's Magazine.—Ueber die Todeswirschen nach Verbrennungen. Von Dr. L. von Lesser.—Ueber Wundbehandlung mit Besonderer Berücksichtigung der Lister'schen Methode. Von Dr. A. V. Puky.—Dickens's Dictionary of Continental Railways. (C. Dickens.)—Fifteenth Annual Report of the Sanitary Commissioner with the Government of India. (Office of Superintendent of Government Printing, Calcutta.)—Sanitary Organisation of Nations. By H. I. Bowditch, M.D.—Réclamations et Réponses. By Dr. Alvarenga.—Fisk. (Bartlett & Co.)—Chorohy Narandu Oddechowego Sucholy i gruzlica. Opracowal Dr. St. Ponikło.—Sunday Magazine; Good Words. (Isbister & Co.)—The Classified Directory of the Metropolitan Charities. (Longmans.)—Remarks on the Mode of Admission to our Medical Charities. By Dr. Thorburn. (Ireland & Co., Manchester.)—Paquelin's Thermo-Cautery. By Dr. Wilson, Baltimore.—Address by Dr. F. N. Manning.—Twenty-third Annual Report of the Proceedings of the Vestry of St. Mary, Newington. (G. Morrish.)—Dr. Watts on the Successful Treatment of Asthma. (Simpkin, Marshall, & Co.)—Report on the Revision of the U.S. Pharmacopœia. Compiled by C. Rice. (New York.)—Leprosy. By W. Munro, M.D. (Heywood, Manchester.)—Time. (York-street, Covent-garden.)—Brief Notes regarding the Indian Service.—The Contemporary Review. (Strahan & Co.)

## METEOROLOGICAL READINGS.

*(Taken daily at 8 a.m. by Steward's Instruments.)*

THE LANCET OFFICE, March 11th, 1880.

| Date. | Barometer reduced to Sea Level, and 32° F. | Direction of Wind. | Dry Bulb | Wet Bulb | Solar Radia in Vacuo | Max. Temp. Shade | Min. Temp. | Rain fall. | Remarks at 8.30 A.M. |
|---|---|---|---|---|---|---|---|---|---|
| Mar. 5 | 30·02 | W. | 54 | 51 | .. | 60 | 46 | .. | Clouds |
| ,, 6 | 30·16 | S.W. | 51 | 48 | .. | 55 | 40 | .. | Overcast |
| ,, 7 | 30·00 | S.S.W | 54 | 51 | .. | 55 | 52 | .. | Cloudy |
| ,, 8 | 30·50 | N.E. | 43 | 40 | .. | 50 | 40 | 0·09 | Overcast |
| ,, 9 | 30·27 | E. | 44 | 43 | .. | 58 | 40 | .. | Overcast |
| ,, 10 | 30·13 | S.W. | 49 | 47 | .. | 59 | 42 | .. | Foggy |
| ,, 11 | 30·48 | S.E. | 44 | 41 | .. | 56 | 40 | .. | Foggy |

# Notes, Short Comments, and Answers to Correspondents.

*It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.*

*Local papers containing reports or news-paragraphs should be marked.*

*Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.*

*Lectures, original articles, and reports should be written on one side only of the paper.*

*We cannot prescribe, or recommend practitioners.*

*All communications relating to the editorial business of the journal must be addressed "To the Editor."*

*Letters relating to the publication, sale, and advertising departments of* THE LANCET *to be addressed "To the Publisher."*

### THE FRENCH SANITARY SOCIETY.

THE Société Française d'Hygiène was founded on the 7th of May, 1877, and since that date we have on several occasions called attention to the good work it has performed. Nevertheless, up to the 31st of December, 1879, the receipts of this Society amounted only to £794, with which, however, a great deal has been accomplished. No less than 50 honorary members, 286 foreign corresponding members, and 399 French members have been enrolled. The latter are required to pay only a small fee, and yet the Society can boast of a surplus. The entire expenditure for the three years amounted to £754, and of this sum only £110 was required for working expenditure; all the rest was spent in publicity and in spreading sanitary knowledge, books, pamphlets, newspapers, lectures, &c. This also includes £22 spent in vaccinating persons who would otherwise have escaped control in this respect. Prizes have been awarded for popular pamphlets on various practical subjects, and the best essays were widely circulated among the classes in most need of information. A chemical laboratory has also been established, and the *Journal d'Hygiène*, the organ of the Society, is now published three times a month. Altogether the Society may be commended for its careful economy of the resources it enjoys, and there can be no doubt that it is gathering strength.

*Scrutator.*—Yes. From the Queen's printers.

### CROTON LINIMENT FOR FITS.

*To the Editor of* THE LANCET.

SIR,—I began to attend a baby, about two months old, on Nov. 25th last. For about a month it had about twenty fits a day without any apparent cause. From Dec. 27th, the course of the case was thus:—

| | | | |
|---|---|---|---|
| Dec. 27th | .. .. .. .. | 19 fits. | |
| ,, 28th | .. .. .. .. | 20 ,, | |
| ,, 29th | .. .. .. .. | 20 ,, | |
| ,, 30th | .. .. .. .. | 15 ,, | |
| (On above day head painted with croton liniment.) | | | |
| Dec. 31st | .. .. .. .. | 21 ,, | |
| Jan. 1st | .. .. .. .. | 12 ,, | |
| ,, 2nd | .. .. .. .. | 12 ,, | |
| ,, 3rd | .. .. .. .. | 6 ,, | |
| ,, 4th | .. .. .. .. | 12 ,, | |
| ,, 5th | .. .. .. .. | 17 ,, | |
| ,, 6th | .. .. .. .. | 5 ,, | |
| ,, 7th | .. .. .. .. | 5 ,, | |
| Jan. 8th | .. .. .. .. | 4 fits. | |
| ,, 9th | .. .. .. .. | 5 ,, | |
| ,, 10th | .. .. .. .. | 5 ,, | |
| ,, 11th | .. .. .. .. | 5 ,, | |
| ,, 12th | .. .. .. .. | 0 ,, | |
| ,, 13th | .. .. .. .. | 4 ,, | |
| ,, 14th | .. .. .. .. | 3 ,, | |
| ,, 15th | .. .. .. .. | 3 ,, | |
| ,, 16th | .. .. .. .. | 2 ,, | |
| ,, 17th | .. .. .. .. | 1 ,, | |
| ,, 18th | .. .. .. .. | 1 ,, | |
| ,, 19th | .. .. .. .. | 0 ,, | |
| ,, 20th | .. .. .. .. | 0 ,, | |

While I am writing you, might I ask if anyone would kindly tell me a means of preventing the ungainly precipitate that ensues on the insertion of liq. ferr. dialysat. in a mixture?—Yours faithfully,

March, 1880. PRACTITIONER.

### THE CHOLERA IN 1849.

MR. D. DAVIES, medical officer of health for Bristol, in a lecture last week at the Medical School, Tyndall's-park, speaking of the epidemic of cholera which visited this country in 1849, remarked in reference to his experience at St. Peter's Hospital:—

"On the third day his colleague Joseph Williams died after twelve hours' illness. In about a fortnight the disease was subdued, after destroying about 140 lives in the house. He quoted the figures from memory. Such was the cholera in those days when the pythogenic hypothesis, pure and simple, ruled in high places, and they were told that simple cleanliness, temperate habits, and warm clothing were sufficient guarantees against the disease. If he sometimes spoke with rancour of the pythogenic theory, it was because he witnessed its miserable failure, at every point, to make any impression on cholera. In spite of soap and water, lime, washing, and physic of all kinds in abundance, 2000 died in Bristol of cholera in 1849; while in 1866, although attacked at thirty different points, the deaths were only 29. Observation of the disease in 1849 had taught him how to meet it. If Asiatic cholera should appear in a district, they should immediately forbid the use of all water drawn from wells in the vicinity of any human habitations. If there was not a supply of water, they should employ a number of carts to carry sufficient water from a distance from some deep spring or other source above the reach of human contamination. They should not trust to analysis for the purity of the water. Water might contain cholera germs when analysis might have pronounced it pure."

### TOBACCO-SMOKING.

*To the Editor of* THE LANCET.

SIR,—As much has appeared in your columns lately on tobacco-smoking, perhaps my own experience, which is that of a smoker of upwards of fifty years, may be interesting.

I began to smoke probably between the ages of seventeen and eighteen, any sort of tobacco I could get. Before the age of twenty-one I was at sea, smoking Trichinopoly or Chinsurah cheroots, which are strong. After being nearly six years at sea, I went out to Bengal, where after a short time I took to Manillas, smoked regularly until my fortieth year, when on my return from furlough I gave it up *at once*, and did without it for fully a year and a half. Then being ordered to Burmah, I again began; continued with Manillas until my return home in 1863, when I took up with a good sound, but not very strong mixture, to which I have been constant ever since, and of which I consume about half a pound a month. I have hitherto enjoyed wonderfully good health. My work was often very hard, and exposed me much to sun and wet. I have not found smoking tend to drinking. I have all my life been a moderate man, a pint of beer at dinner and one glass of brandy-and-water at night being all that I wished for, and for the last two and a half years I have been a total abstainer; this I began from necessity, and continued as an experiment, and am at least in as good health as when taking stimulants. I am now (above seventy), sound in wind and limb, and my digestion and heart are, I may safely say, above the average. Now, does smoking do any good? I am not sure. I think men are better not to give way to it, for it is an indulgence, and is to many disagreeable; but I think it has some advantages. I find it soothing when I have been annoyed. I fancy that it aids digestion after a meal, and if kept long without a meal it helps to lessen the craving for food; but, like many other things good in moderation, this also must be used moderately. I have seen digestion grievously impaired, eyesight almost destroyed, and the nerves almost ruined by excess.

Yours faithfully,

March 6th, 1880. TOBACCO.

*Acting Surgeon.*—The qualifying examination must be passed. A letter addressed to the Director-General of the Army Medical Department, 6, Whitehall-yard, S.W., will obtain the information desired on all the points mentioned.

### HELMINTHOLOGY.

*To the Editor of* THE LANCET.

SIR,—Had "Helmints" referred to the "Medical Digest," sections 934 and 935, he would have found many more suggestions than those offered by your numerous correspondents, and among others one that has proved of immense value—viz., the injection of half an ounce of warm salad oil, when the child is nearly asleep, allowing it to remain all night. This plan, combined with santonine at bedtime and iron during the day, seldom fails to effect a speedy cure in the worst cases.

Yours &c.,

RICHD. NEALE, M.D. Lond.

Boundary-road, South Hampstead, March, 1880.

*B. W. W.*—We will answer our correspondent's question with reference to the best kind of stove for bedrooms next week.

*Mr. M. Davies.*—See THE LANCET of Jan. 11th and 18th, 1873; and of Dec. 16th, 1876.

### ALOPECIA.

*To the Editor of* THE LANCET.

SIR,—Can any of your readers suggest any cause or the treatment for unusually rapid alopecia of the whiskers? No specific history. Scalp well nourished and well covered, though prematurely grey.

Yours &c.,

Feb. 1880. W.

### IODIC PURPURA.

AT a meeting of the Medical Society of the College of Physicians in Ireland, held on the 3rd inst., Dr. G. F. Duffey read a most exhaustive paper on the "Purpuric Eruption which occasionally follows the Administration of Iodine," and detailed a case which occurred in his practice. Arising sometimes during the exhibition of the iodide of potassium, it appears almost invariably to select the front of the legs as its peculiar site, seldom passing above the knees. During the discussion which ensued it was casually mentioned that M. Fourneaux, of Paris, had recommended claret as a vehicle for the administration of iodide of potassium when prescribed in large doses, and that thus all the injurious effects of iodine would be prevented.

*A Constant Reader* does not say to what L.M. he refers. He will find particulars in the Medical Directory.

*Dr. Kerr* had better write direct to Corbyn and Co., High Holborn.

### "COLD AND DEATH."

*To the Editor of* THE LANCET.

SIR,—I have been very much interested in the able leader, under the above title, which appears on page 842 of the second volume of THE LANCET for 1879, and I feel deeply obliged to its writer. That a body-heat of 98·4° to 98·6° F. is both a sign and effect of health is beyond controversy, and it is equally beyond all doubt that this standard is to be maintained under all climatic influences. As certain points connected with this subject have occupied my attention, I will endeavour, with your permission, to make a few brief remarks on such of these as strike me forcibly, and from which, it appears to me, some reliable deductions are capable of being effected. Although difficult to trace, yet they are not indiscoverable if we only will *see* matters which at first sight appear beneath notice. The question comes to be how the *normal* temperature is to be retained under the all-varying circumstances of everyday life. Health, like everything else, is one of different degrees, and scarcely five per cent. of individuals of the same age and sex can be said to possess the same degree of health, by which I mean bodily health, though not with mental disease.

The following are rough extracts from some notes made on observations on my own person in an experimental mode of life during last summer, which was an unusually hot one, and during this winter, which is an unusually cold one, in India. It was conducted for twenty-two days in the former and eighteen in the latter, and I have drawn averages of fifteen days in both, because prior to this experimentation I had for these number of days made observations on similar points. A record of the body-temperature, that of the external air, pulse, respiration, urine, and stools was made. Before any experimental change, the average body-temperature was found to be 98·6° in the morning and 98·8° in the evening in hot weather; while in the cold it was respectively 98·3° and 98·4°. On two occasions it was taken at 3 P.M., the hottest part of the day in the hot weather, and found once to be 98·10°, and again 98·9°; the average quantity of urine was 48 oz.; the bowels were moved once per diem; the general health was good. The diet was ordinary nourishing diet; the quantity of alcohol taken consisted of a pint of ale at lunch and a quart for dinner. A tepid bath was taken at about 10 A.M. The experiment consisted of taking a cold bath three times a day—6 A.M., 1 P.M., and again at 5 P.M. The diet remained the same, but four ounces of brandy were added to what alcohol was before taken in the shape of beer; the mode of life as to exercise, work, &c., remained almost precisely the same. The average quantity of urine now voided in twenty-four hours was calculated to be 50 oz. The morning temperature before the first bath was found to be 98·5°, and the evening temperature before the third bath was 98·6°. The bowels moved on an average three times in every two days. During a week of the hot weather experiment (not counting the above time) the baths were continued three times a day; the diet and other things remained the same, except that the alcohol was dropped *in toto*. With the exception that the bowels were moved once a day, there was no great difference to be made out from the observations taken. Now, in the cold weather my average temperature, without any alteration in the *modus vitæ*, morning and evening respectively, seems to be 98·3° and 98·5°. During this time I was called out to a case at 1 A.M. I then took my temperature immediately on getting out of bed; it was 98·1°. On returning after about an hour it was again taken, and found to be 98·4°. The quantity of urine was 60 oz., and the bowels were moved once a day. The diet was the same as in the hot weather; but now one pint of ale only was taken, with one brandy-and-soda, in the four-and-twenty hours. One cold bath was taken. During experimentation, which consisted of taking a warm bath twice a day, with no alcohol in the same diet, other things the same, the average temperature both morning and evening remained the same, 98·5°. The most important point in this, to which I would draw attention, is the addition of four ounces of butter and two of sugar to the otherwise *same* diet. The quantity of urine showed an average of 61 oz., and the bowels were moved on an average twice. On one day six ounces of butter were taken, and the bowels acted three times, but not loose.

To my mind—and, no doubt, in that of the editorial writer—it appears that we must look to the healthy body under average circumstances equally as much as to cases of disease, wherefrom safe conclusions as to hygiene can be drawn so as to be of practical utility.

Yours truly,

India, Dec. 1879. JOHN C. LUCAS.

### SCLEREMA.

IN connexion with a case shown at the last meeting of the Pathological Society by Dr. Stephenson, the following account, taken from the *New York Times*, may be interesting, though, of course, it must be received with the caution always necessary to be observed in respect of medical communications from non-professional sources:—

"The most extraordinary case of sclerema, or petrifying of the skin, known in medical history was made the subject of a medical clinic in Cleveland on Jan. 31st. The case was that of a child brought here from New Philadelphia, and it is becoming literally a petrified child. The flesh is cold and hard almost as marble, and while the child, which is nearly three years old, continues to live it can only freely move its lips and eyes. It has none of the warmth and pliability of human flesh, and sleeps with its eyes open, presenting a most ghastly spectacle. Until six months ago it was in perfect health. This is the thirty-fifth case discovered, and an important one, inasmuch as no instance has heretofore been known where the entire body was affected. The child must die, as complete petrification of the skin will ensue."

*Paterfamilias.*—Certainly.

### ON THE ERGOTISATION OF WHEAT DURING THE YEAR 1879.

*To the Editor of* THE LANCET.

SIR,—The peculiarly sunless year of 1879 has, amongst other things, brought about an amount of ergotisation in the wheat crops that is, as far as I can learn, quite unprecedented. With the details of this subject I will not trouble your readers beyond mentioning the fact that the absence of sun favours the production of ergot in wheat in two ways—first, by making the wheat late in point of time in flowering, so as to approximate the flowering of the wheat with the maturation of the Claviceps sporidia more nearly than usually happens; and secondly, by retarding the process of fertilisation of the wheat, for it is at this time that the ovule becomes affected with the ergot-producing fungus. I have examined several samples of last year's wheat, grown in the vicinity of King's Lynn, and have found almost all those which were grown in the marshland or fen district contaminated by a considerable percentage of ergots, some more and some less. Upon the health of the general public I believe this will have no appreciable effect, because of the large quantity of foreign corn consumed by us. But in certain districts it is the custom for the labouring families to live a great part of the winter, at any rate as long as it lasts, upon the corn gleaned by them during the harvest, which they have threshed and dressed for themselves in the most primitive manner. In many of the samples I have seen that have been threshed and dressed by the most improved agricultural implements, a great number of ergots were not removed, so that a family subsisting for several weeks upon corn gleaned from a district in which ergot is abundant this year, and which had been threshed by a flail and winnowed by a current of air, would stand a poor chance of escaping some of the constitutional effects of ergot.

From the conversation I have had with agriculturists upon this subject, they one and all ignored the idea of these foreign bodies being ergots at all until they were demonstrated to them, the little black bodies being mistaken for the excreta of birds or of rats or mice. Not being aware of the presence of the ergots, nor of their poisonous nature, many samples find their way to the mill'er in a condition that the farmer could very considerably improve by more careful dressing.

Your obedient servant,

King's Lynn, Feb. 16th, 1880. CHARLES B. PLOWRIGHT.

*Dr. Sinclair*, (Moulmein.)—The work of Brierre de Boismont, published by Renshaw, contains several cases of the kind. We regret we cannot find room for the communication.

*W.*, (Beckenham.)—Declined.

*A Subscriber.*—The question is not a legal one.

### A PECULIAR MEDICAMENT.

*To the Editor of* THE LANCET.

SIR,—As the following may interest some of your readers, I take the liberty of forwarding it for insertion in your journal, should it suit you to give it space.

Living in Canada, in the vicinity of a Chippewa-Indian settlement, I am frequently asked for spirits to prepare various nostrums, in which they place much confidence. On one occasion an old fellow made his appearance with his bottle, which he requested me to fill. It already contained some curious-looking substance. This, on inquiry, proved to be the testicle of a beaver. The Indian explained to me that, when mixed with spirits, the concoction was a cure for certain kinds of headache. I related this circumstance to a friend, who shortly after wrote to me that he lit upon a passage in Juvenal, which showed that the pharmacy of the North-American Indian was the same as was practised in the first century of the Christian era. The passage is from Sat. xii., lines 30 to 36, and when translated reads as follows:—"A man with an overladen ship, when his hold was nearly full of water, essayed to come to terms with the winds by throwing part of his cargo overboard, imitating the beaver, who voluntarily makes himself a eunuch, desiring to escape with the loss of a testicle, for which the hunters are pursuing him; with such medicinal qualities does he know that his groin is endowed."

Yours faithfully,

THOMAS SIBBALD.

Eldon Hall, Georgina, Ontario, Canada, Jan. 10th, 1880.

*A. Bacterium.*—The questions proposed for the Boylston Medical Prize for the year 1880 are: (1) Antiseptic Treatment. What are its essential details? How are they best carried out in practical form? (2) Diphtheria, its Causes, Diagnosis, and Treatment. The prize is one hundred and fifty dollars. Dissertations must be transmitted, post paid, to Dr. D. H. Storer, 182, Boylston-street, Boston, U.S., on or before the first Wednesday in April next.

## INDIAN MEDICAL SERVICE.

*To the Editor of* THE LANCET.

SIR,—On Thursday, Feb. 26th, Dr. Playfair asked the Under-Secretary of State for India if the Government of India contemplated reducing the present fixed number of the higher grades (deputy surgeons-general) of the Indian Medical Service, and of reserving the higher grade (surgeon-general) in each Presidency for members of the British Medical Service only; and, if so, whether it was the intention to offer increased pensions to the senior officers as a compensation for the serious change which would thus be made in their prospects. Mr. E. Stanhope replied that the appointment of surgeon-general—i.e., the head of the Medical Department—at the three Presidencies would be held by an officer of the British Medical Service; that the Government of India had offered to the three surgeons-general and the six deputy surgeons-general of the Indian Medical Service, whose appointments have been done away with, or who have been displaced by officers of the British Medical Service, their retirement on the extra pension of their grade. But, Sir, what is to be done for the surgeons-major of the Indian Medical Service who have completed twenty years' service and upwards, who had a right to expect promotion to the higher grades, and whose prospects now are simply ruined? Is this guaranteeing to them their rights and privileges as they were promised in the Henley clause of the Act of Parliament? I submit no greater insult or injustice could be done to any body of men. Why not do away with the Indian Medical Service entirely, either by amalgamating it with the Army Medical Department, or by offering increased pensions, or a sum of money in addition to the ordinary rate of pension to which each officer may be entitled (such rates of pension to be those granted in the recent Warrant for the Army Medical Department, and all leave being counted as service from the date of entering the service)? This has been done to officers in the Indian Staff Corps of the rank of lieutenant-colonel. Those officers who were in the service before the Indian mutiny I believe could claim compensation from the Secretary of State for India if their case were taken into a court of law; but the more expedient course to adopt is, I think, to bring pressure upon the Secretary of State for India in Parliament, and to make known the present position of the service to the different medical schools, when the professors would advise young men not to enter the service, but to join the ranks of the British Medical Service. It is indeed high time this was done; for on examining the pass-lists of gentlemen who have recently entered the British and Indian Medical Services, published in THE LANCET of Feb. 28th, it will be seen that those who have passed for the Indian Service are a better stamp of men than those who have entered the British Service—i.e., if we can judge from the number of marks the successful candidates in each service obtained. Fifty-two gentlemen competed for twenty-three appointments in the Indian Service, and forty-eight were reported qualified. Twenty-five gentlemen, therefore, although qualified, were unsuccessful in obtaining appointments, and I congratulate them that they did not obtain them, for I hope at the next examination they will compete for the British Medical Service.

In THE LANCET of Feb. 21st the pensions of the two services are given, and it will be seen that those of the Indian Service are much smaller than those of the British. One mistake, however, appears in the pensions of the Indian Medical Service, for there is no such rank in the Indian Service as brigade surgeon, as mentioned in THE LANCET. The following are the pensions:—

*Army Medical Department.*

| | | | | | |
|---|---|---|---|---|---|
| Surgeon-major after 20 years' service | .. | £365 | 0 | 0 | a year. |
| If a brigade surgeon ,, ,, | .. | 501 | 17 | 6 | ,, |
| Surgeon-major after 25 ,, | .. | 410 | 12 | 6 | ,, |
| ,, ,, 30 ,, | .. | 456 | 5 | 0 | ,, |
| If a brigade surgeon ,, ,, | .. | 547 | 10 | 0 | ,, |

*Indian Medical Service.*

| | | | | | |
|---|---|---|---|---|---|
| Surgeon-major after 17 years' service | .. .. | .. | £220 | a year. | |
| ,, ,, 21 ,, | .. .. | .. | 292 | ,, | |
| ,, ,, 24 ,, | .. .. | .. | 365 | ,, | |
| ,, ,, 27 ,, | .. .. | .. | 456 | ,, | |
| ,, ,, 30 ,, | .. .. | .. | 550 | ,, | |

But as all leave in excess of two years in twenty years' service and three years in twenty-five years' service counts against service for pension, scarcely any man becomes entitled to his pension at the time it would otherwise become due. I know some surgeons-major of twenty-four and twenty-five years' service who are entitled only to the lowest pension—i.e., £220 a year,—because their health has compelled them to take leave of absence on medical certificate, and they have in consequence been unable to serve the necessary time in India for the pension to which they would be entitled had not their health given way.

I trust you will give the case of the officers of the Indian Medical Service your serious consideration, and do what lies in your power to get their present unenviable position brought prominently before Parliament and the teachers and professors of the various schools through your influential journal.

Yours faithfully,

March, 1880. JUSTICE.

*Mr. John Service.*—1. We cannot promise an early insertion of the paper. 2. Among the German Clinical Lectures lately published by the Sydenham Society will be found one upon the Feeding of Infants. Dr. Wm. Roberts's forthcoming lectures at the College of Physicians are to be upon the other subject upon which our correspondent is seeking information.

*Physic.*—The poster is very bad.

*Mr. J. S. Window* may obtain the information he desires by application to his usual medical attendant.

## "HINTS FOR THE HUNTING FIELD."

*To the Editor of* THE LANCET.

SIR,—Will you allow me to make a few remarks and some corrections on this subject, which appears in your issue of to-day?

With regard to the "grip," I maintain that it should be so far as is possible entirely with the knees, and not in conjunction with the side of the leg any further than can be avoided. You often see a bad rider hammering along with his trousers rucked halfway up his leg, and a goodly amount of sock appears below them and the top of his boot. This is because he "grips" his horse with his leg, which is ever shifting, and therefore no steady seat can be thus acquired; but the trousers of the man who "grips" with the knee will hang perfectly straight, even though he wear no straps. Were a person upon leaving his stable for a day's hunting to start with a good tight "grip" with knee and leg, and continue the same through a long day, I should imagine he would be fairly done up at night, but this is not necessary. A safe seat depends as much upon *balance* as upon "grip," and the "grip" should be tightened and relaxed as will be found necessary; but that it should be safe, and enable one to acquire a good seat, it *must* be with the knees.

How one is to "prepare to fall easily" is not made very clear in your impression; but the fact is that men who are really good horsemen, and have ridden since they were five or six years of age, are probably a little more active in and *out* of the saddle than others.

The stirrup-iron, in my opinion, should be large, because if it be tight enough at any point to grasp the boot, and one is riding well "home," in the case of a fall the result may be serious, but this seldom occurs with good riders. Spring stirrups should be used, and upon no account should the spring which is attached to the iron for fastening the stirrup-leather be put up, because if the opening be left open, the stirrup and leather may come off; but I must say I never heard of a man who was dragged along in the stirrup being fortunate enough to part with his boot, nor do I believe it possible, however the boot is made, that the "foot may be readily withdrawn."

With regard to tight girthing, a horse with good oblique shoulders, and a groom to put the saddle where it ought to be, the girths will be far enough from the organs of respiration; but if the horse has not good shoulders, your girths must be tight.

I feel that the *Field* would perhaps be the more suitable medium for this discussion; but I could not allow the remarks in your journal to pass unnoticed.

I am, Sir, yours truly,

Hyde, Cheshire, March 6th, 1880. FRED. PEARCE.

## MEDICAL CHARGES.

*To the Editor of* THE LANCET.

SIR,—You would much oblige if you would publish in a corner of your correspondence sheet the following memo. of account, and I would ask any of your readers to put a fair and usual charge. The patient lives in a first-class house, rent probably £300 to £250 a year, and drives carriage and pair in good style. Visits special are those in which immediate attendance is requested and rendered.

July 20.—Vis. spl. Pil. 8.
21.—Vis. spl. M. 8.
Vis. evg. Inject. morphia.
22.—Vis. Haust. ij. M. 8.
Pil. 30 (gr. ij. quin. sulp.)
23.—Letter of patient's case to consultant.
24.—Vis.

I should say that my patient objected to my putting down the last items. The facts being as follows:—On the morning of 23rd I received a note from patient's wife in the usual friendly way, saying that her husband wished to consult Dr. ——. I, of course, at once wrote to Dr. ——, and, having on the morning of 24th received his reply, I at once called on my patient, as it has always been my habit to do in similar circumstances.

Your obedient servant,

March 5th, 1880. EXTRA-URBAN PRACTITIONER.

## MEASLES DEVELOPED TWICE IN A MONTH.

*To the Editor of* THE LANCET.

SIR,—I believe the following case to be unusual.

I attended a young married woman with fully developed measles, and put her off the list on Jan. 24th, quite well. She went away for change, and returned on Feb. 14th. On the 17th I was asked to see her, and found her with a full crop of measles again, from which she has since recovered.

I should say there has been an epidemic of measles here: about 400 cases in a population of rather over 2000.

Yours faithfully,

Looe, Cornwall, March 1st, 1880. G. KERSWILL.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Gowers, London; Dr. Duckworth, London; Mr. C. Bader, London; Dr. Kane, New York; Mr. Hosegood, Swinton; Mr. Startin, London; Dr. Kerr, Leytonstone; Dr. G. Budd, Edinburgh; Mr. Whalley, Edinburgh; Mr. Robinson, Birkenhead; Mr. Smith, London; Mr. Davies, London; Surgeon-General Longmore, Netley; Dr. Murphy, Sunderland; Dr. Walmsley, London; Mr. Critchett, London; Mr. Matravers, Melksham; Dr. Neale, London; Dr. Steavenson, London; Dr. M'Calman, Ilsley; Mr. F. W. Cory; Mr. Wyatt, Kingsdown; Mr. Elliott; Mr. Paramore, London; Mr. Roche Lynch; Mrs. Tatham, Oakhill; Mr. Williams, Swansea; Mr. Allan, New Wandsworth; Mr. Sutton, Sittingbourne; Mr. Worsley, Preston; Mr. Dawson, Manchester; Mr. Crerar, Maryport; Mr. Meymott, Ludlow; Mr. Bull, Newcross; Dr. Saundby, Birmingham; Mr. Edwards, Bala; Dr. Dowse, London; Mr. Pearce, Hyde; Dr. Hughes, Dinorwic; Mr. Daniell, London; Mr. Lucas, Newark-on-Trent; Dr. Ross, Kamptee, India; Mrs. Wilson, Inverness; Dr. Reid, Tenby; Mr. Moulding, Liverpool; Mr. Blair, Leeds; Messrs. Halrick and Co., Glasgow; Mr. King, Leighton Buzzard; Dr. Bisse, Mahanoy City, U.S.A.; Messrs. Paul and Co., London; Mr. Andrew, Stockport; Messrs. Evans and Co., Wrexham; Dr. Jones, Netley; Messrs. Burgoyne and Co., London; Messrs. Burgess and Co., London; Mr. Gawood, York; Messrs. Richardson and Co.; Dr. Coates, Sirhowey; Mr. Snell, Stamford; Messrs. Clowes and Nash, Norwich; Mr. Williams, Talgar; Mr. Scott, Manchester; Mr. Gurner, London; Mr. Fisher, Kendal; Mr. Dunman; Mr. Greenwood, Liverpool; Dr. Creighton, Cambridge; Mr. Edwards, Faversham; Mr. Stilliard, Birmingham; Messrs. Harrison and Brass, Elgin; Dr. Ormerod, London; Mr. Clifton, St. Leonards-on-Sea; Dr. Webb, Wirksworth; Mr. Gardiner Brown, London; Mr. Van Voorst, London; Dr. Douglas, Sunderland; Dr. Wylie, Stewarton; Mr. Allsop; Mr. Hayden, Tunbridge Wells; Mr. Dixon, Newcastle-on-Tyne; Mr. Seaton, Sunbury; Mr. Dixon, Newcastle-on-Tyne; Mr. Praeger, Houghton-le-Spring; Dr. Caird; Mr. Louis Greg; Mr. J. Henry, Edinburgh; Mr. Kilner, Bury St. Edmunds; Mr. Sydney Smyth, London; Dr. Holmes, Bromyard; Mr. Leaver, Stratford-upon-Avon; Mr. J. C. Renton, Glasgow; Mr. Heeley, Stoke Devonport; Mr. F. M. Brown, Wansford; Mr. Austin; Mr. Ayres, Deptford; Mr. Kemp, London; Dr. Tatham, Salford; A Subscriber, Egham; C.; J. S. W., Aberaychan; Tobacco; Private, R.V.; A Constant Reader; Extra-urban Practitioner; M.D., Hastings; Spithead; F. T., Devizes; Subscriber; F. W.E.; M.R.C.S.; Medicus, Forest-gate; Mr. R. F.; Scrutator; Surgeon, R.N.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Bryan, Littlehampton; Mr. Hayward, Bristol; Mr. Macnamara, Uxbridge; Dr. Webb, Wirksworth; Mr. Breeze, London; Mr. Knott, Worcester; Dr. Pritchard, Teynham; Dr. Hartree, Strantown; Mr. Adams, Rippingale; Dr. M'Carthy, Darlington; Mr. Hammett, Taunton; Mr. Ross, Alderney; Mr. Fulton, Toronto; Mr. Rickes, Wolverhampton; Mr. Pearce, Southampton; Mr. Ekins, Bedford; Dr. Taylor, Cardiff; Messrs. Maclachlan and Co., Edinburgh; Mr. Price, Edinburgh; Mr. Hewes, Halstead; Mr. Farrar, Bradford; Mr. Henry, Sherborne; Dr. Flood, Dublin; Mr. Slingsby, London; Mr. Hughes, Woodbridge; Mr. Wood, Bromsgrove; Dr. Donaldson, Glasgow; Mr. Hippisley, Leicester; Mr. Boverhoudt, Elvington; Messrs. Beatty and Son, Sunderland; Messrs. Gabriel and Trope, London; A. B.; N. B.; N. A.; L.R.C.S., Newbliss; Medicus, Walthamstow; Kappa, Durham; X. Y., Southwark; Medicus, Edinburgh; R. R., Glasgow; Cymro; N. B. G., Coatbridge; W. H., Birmingham; M.D., Hastings; X. Y. Z.; Hermes; M.D., Manchester-square; Surgeon; Medicus, Peterborough; Alpha, Edinburgh; C. H., Holloway; &c.

*Camberwell and Peckham Times, Rock, L'Union Médicale, Liverpool Daily Post, Surrey Advertiser, Brighton Guardian, Manchester Examiner, Shield, Church of England Temperance Chronicle, Lea Avisa, Hertfordshire Mercury, College and Clinical Record, Bristol Mercury, Journal of the Society of Arts, Isle of Wight Journal, Bournemouth Visitors' Directory, Carlisle Patriot, Warehousemen's and Drapers' Trade Journal, Croydon Advertiser, &c. &c.*, have been received.


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# Medical Diary for the ensuing Week.

## Monday, March 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Flower, "On the Comparative Anatomy of Man."

MEDICAL SOCIETY OF LONDON.—8½ P.M. The President (Mr. Gant) will deliver an opening Address.—Dr. Ord, "On a Case of Thoracic Aneurism treated by Electrolysis, and Observations on Thoracic Aneurism."

## Tuesday, March 16.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Schäfer, "On the Physiology of Muscle."

STATISTICAL SOCIETY.—7½ P.M. Surgeon-General T. G. Balfour: "Vital Statistics of Cavalry Horses."—Professor Leone Levi: "A Survey of Crimes and Offences in England and Wales from 1857 to 1878."

PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. The following Specimens will be shown:—Specimens illustrating the Histology of Granular Kidney; Section of Secondary Tumour after Removal of Breast; Epitheliома of Penis; Melanosis of Finger; Aneurism of Mitral Valve; Aortic Aneurism opening into Right Auricle; Ulcer of Stomach; Section of Molluscum Contagiosum; Microscopic Sections of Elephantiasis and Photographs of the same from Shanghai; Horny Growth from Lower Eyelid; Skin Disease, probably Lichen Ruber (living specimen); Drawings of Cancer; Morphœa in process of rapid Recovery (living specimen); &c. &c.

## Wednesday, March 17.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1 P.M.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Flower, "On the Comparative Anatomy of Man."

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Lumleian Lectures: Dr. W. Roberts: "Researches on the Digestive Ferments and the Preparation and Use of Artificially Digested Food."

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.—7½ P.M. Council.—8½ P.M. Mr. Francis Fox, "On Irregularities of the Teeth and their Surgical Treatment."

## Thursday, March 18.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Professor Dewar, "On recent Chemical Progress."

HARVEIAN SOCIETY.—8½ P.M. Mr. A. J. Pepper, "On a Case (and prepared Specimen) of Malignant Disease of the Hip."—Mr. Knowsley Thornton, "On the various Methods of dealing with the Pedicle in Ovariotomy."

## Friday, March 19.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Flower, "On the Comparative Anatomy of Man."

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Lumleian Lectures: Dr. W. Roberts: "Researches on the Digestive Ferments and the Preparation and Use of Artificially Digested Food."

ROYAL INSTITUTION.—8 P.M. Evening Meeting.—9 P.M. Professor Tyndall: "Goethe's Farbenlehre (Theory of Colours)."

CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Thos. Smith: (1) "Spontaneous Gangrene of the Thumb and Fingers of the Right Hand"; (2) "On two Cases of Cystic Hygroma."—Dr. de Havilland Hall, "On a Case of Intrathoracic Sarcoma."—Mr. Nettleship, "On two Cases of Sympathetic Ophthalmitis, setting in three weeks after Excision of the other Eye."—Dr. F. Taylor will show a Case of unusual Transmission of Cardiac Bruit by the Lung.

## Saturday, March 20.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. Saintsbury: "Dryden and his Period."